

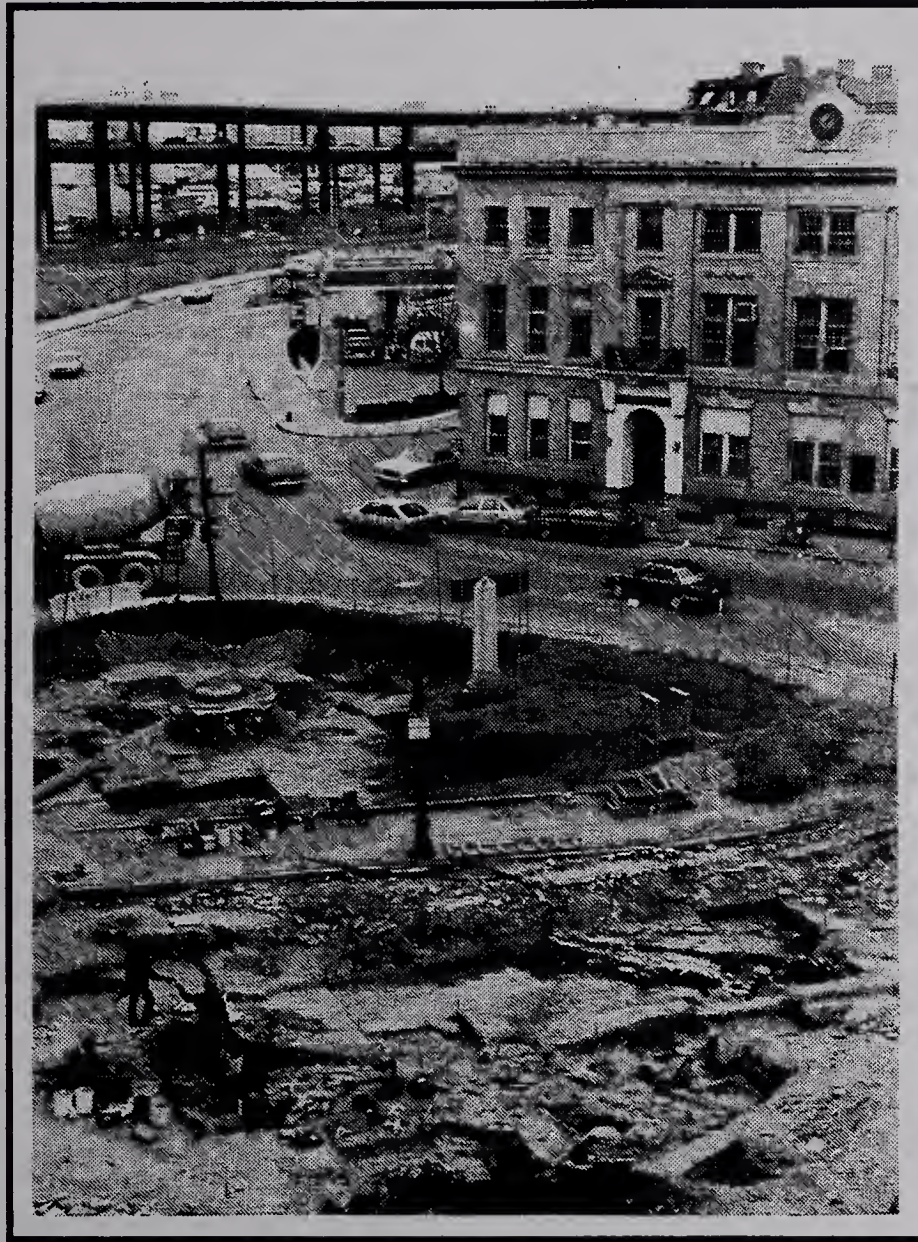
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REDWARE AND REDCOATS

A Popular Report
on the Archaeology Performed in Charlestown, Massachusetts
for the
Central Artery North Reconstruction Project



prepared by

The Public Archaeology Laboratory, Inc.

for the

U.S. Department of Transportation/Federal Highway Administration

and the

Massachusetts Highway Department

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THE BACKGROUND OF THE PROJECT

WHY ARCHAEOLOGY?

The Central Artery/Third Harbor Tunnel Project is a multi-year redesign of Boston's road system. It requires the relocation of the city's existing central highway artery to new underground tunnels, and the construction of an additional tunnel under Boston Harbor. The benefits of this highway improvement program will be to enhance the city's links with its airport and other destinations to the north, to relieve chronic problems with traffic congestion and air pollution, and to open up Boston's waterfront to new parks and open space. When the project was initiated in the early 1980's, its planners divided the corridor into several sections. The northern section passes through a part of Charlestown, Massachusetts. This historic community, just north of Boston, is the home of the Bunker Hill monument, the navy yard which preserves the U.S.S. Constitution, or "Old Ironsides", and other important elements of American history.



Before highway construction could begin in Charlestown, the "environmental impact" of the project on various aspects of the community was evaluated. Studies examined how the project would effect air quality, traffic flow, and many other environmental factors. The effect of the project on "cultural resources" such as historic and archaeological sites was also considered as part of the overall environmental impact which would result from such a large construction project.

State and federal laws require that when a public agency spends public money on beneficial projects, such as roads, the agency is responsible for insuring that the project will not destroy important historic and archaeological sites. A portion of highway construction funding is set aside for the purposes of conducting archaeological investigations. These investigations can take a few weeks or several years, depending on whether or not archaeological sites are found within the construction area, what kind of sites are found, and how likely they are to provide new information about local or national history. If important sites are found during the planning process, they can sometimes be pro-

tected by redesigning the project so that the site is avoided. If this cannot be done, then the site is excavated, and the information it contains is recorded for future generations. During construction of the Central Artery in Charlestown, this is what happened.

During the early 1980s, a team of archaeologists began the task of locating and identifying archaeological sites which might be affected by the new highway. They identified many important archaeological sites in Charlestown that could be destroyed by the project. With the help of historic maps, books, photographs, and other historical records, the archaeologists investigated nearly 100 sites within the construction zone. Many were damaged by modern development, however seven relatively undamaged sites were considered by the State Archaeologist (*the person who oversee's all the archaeology conducted in the Commonwealth*) to be so important that they were scheduled for full excavation. The sites were given names based on their owners' names or on the type of historic activity that took place there. They included the Henley Distillery, Ingalls-Penny, Newhall-Runey, Parker-Harris, Town Dock Pottery, and Town Dock Wharves/Dry Dock sites, and the City Square Archaeological District. Two additional sites were found and evaluated after the excavation had gotten underway. These were called the Smith Site and the Town Dock Pottery Prehistoric Site.

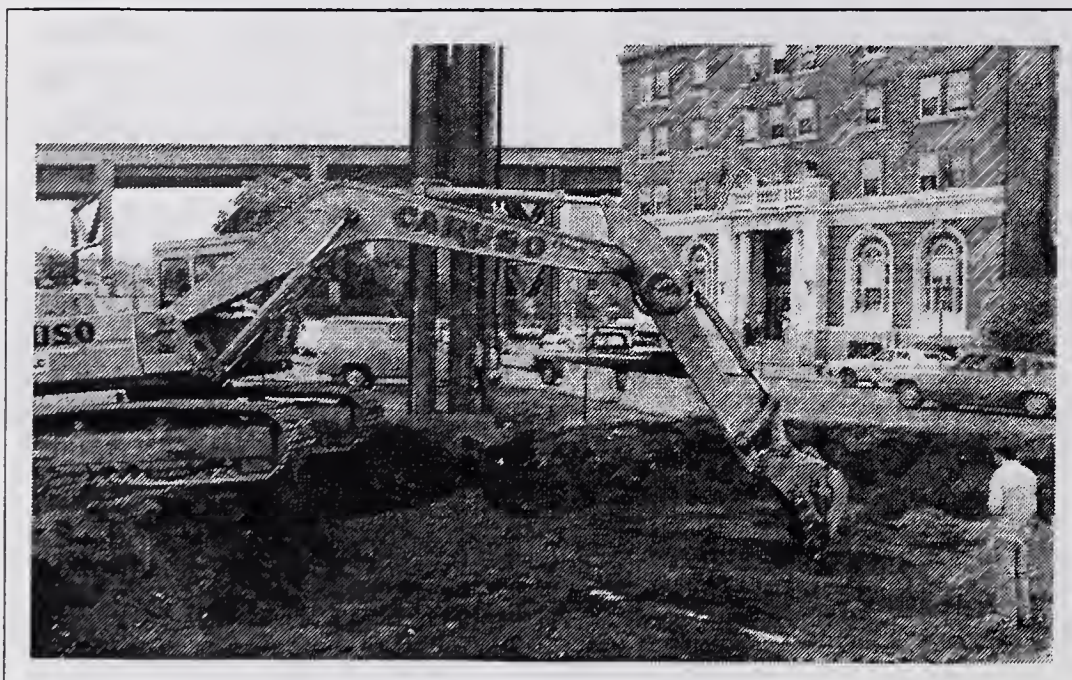
The Massachusetts Highway Department selected The Public Archaeology Laboratory, Inc. (PAL Inc.) of Pawtucket, Rhode Island to conduct the excavation at these important sites. The excavations took several years, from 1985 to 1987, and involved the expertise of many people. Before starting, PAL Inc. archaeologists prepared a detailed plan, or research design, with specific research topics for each site. The archaeologists organized their research efforts around a series of themes related to Charlestown's historical and cultural development between 1630 and 1880. By concentrating on specific topics the archaeologists were able to decide which sites should be fully excavated.

Charlestown was an important commercial port that relied upon maritime facilities to build, support, and maintain a fleet of ships. Therefore one of the topics that concerned the archaeologists was the construc-



tion of these maritime facilities - wharves, warehouses, and early docks. The commercial growth of the community also depended on the important ceramic industry that thrived in Charlestown between 1630 and 1880. Excavations were directed at answering questions surrounding the different techniques employed by Charlestown potters and the changing form and decoration of the ceramics. Since Charlestown potters traded their wares throughout New England and beyond, information concerning the ceramic industry also related to economic development in all of the colonies.

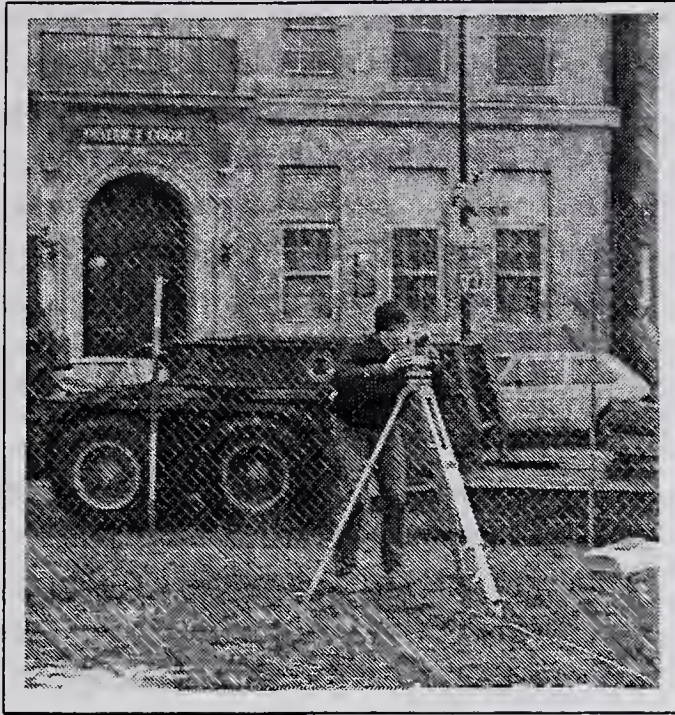
Charlestown was also an important colonial city that served as a cultural center in Massachusetts. Archaeologists were interested in Charlestown as an urban community. Their work in City Square focused on Charlestown's evolution into a city. Part of that evolution included becoming a center for entertainment and dining. Through the study of diet and food preparation, what archaeologists call foodways, they sought to trace the growth of New World cooking and its English and European influences. The saying "you are what you eat" takes on new meaning in the hands of trained specialists who look upon eating as an important part of culture. Part of this study of eating also involves the development of dining utensils including ceramics. For this reason Charlestown was doubly important as a hub of ceramic manufacture.



FIELDWORK

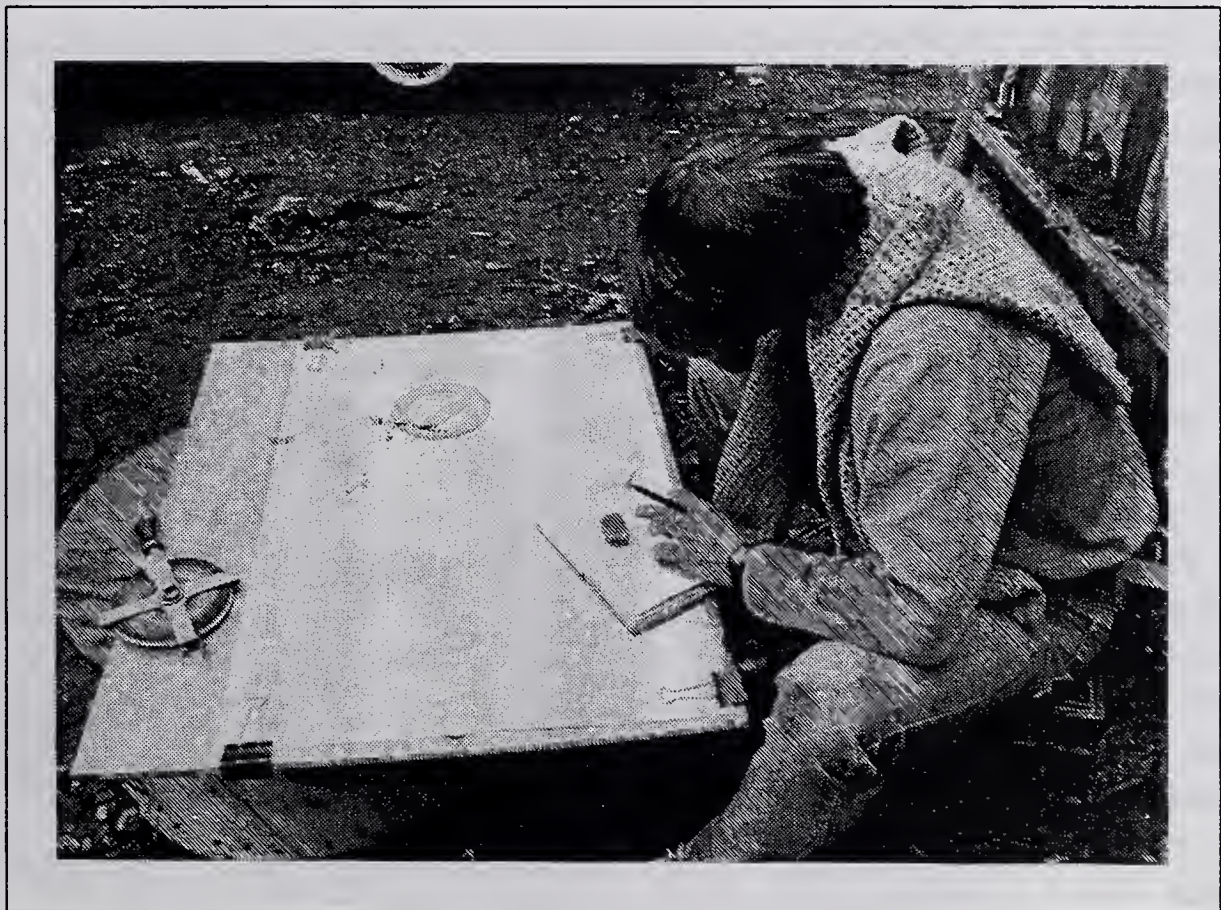
Doing archaeology along the highway corridor was very challenging. Digging took place in the shadow of Interstate 93, under conditions that were often noisy, dark and dirty. In almost all cases, the sites were covered by several

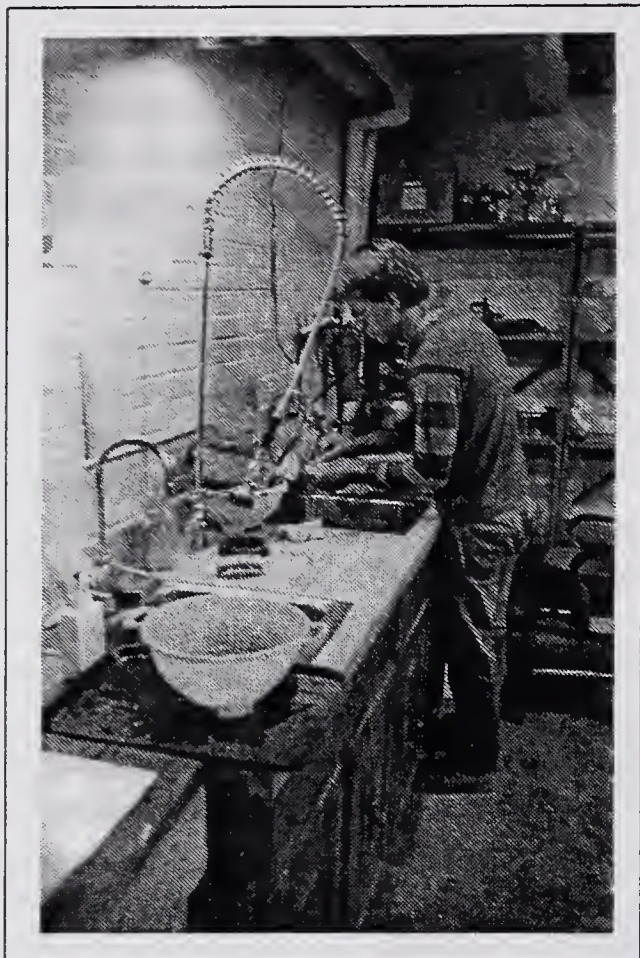
feet of fill that was dumped there at different times over the last 350 years. This fill was made up of soil, brick rubble, ash, and sand that was of little or no archaeological interest. Heavy machinery had to be brought in so that the fill could be removed and the sites could be exposed. Sites are composed of artifacts, which can be any object made or used by humans, and features, which are made when humans are using a site. Examples of features are trash pits, camp fires or house foundations.



When fieldwork began at each site, the archaeologists first task was to establish reference points for mapping the features and artifacts which compose an archaeological site. Next, the site was divided into equal sized squares. This grid system of squares allows the archaeologists a way of keeping track of where all the pits, building foundations, and artifacts are found on the site. As each square is excavated, the archaeologist makes a map that shows where each artifact was located within the square.

All digging was done with shovels or pointed masons' trowels. Every inch of soil that was dug up was sifted through a wire screen to recover artifacts such as broken fragments of pottery, glass, wood, or animal bones. Samples of peat, soil, shell, charcoal, and wood were also taken and subjected to various kinds of special analysis in the laboratory. Every step in the excavation was mapped and photographed and careful field notes were made.





ARTIFACTS IN THE LABORATORY

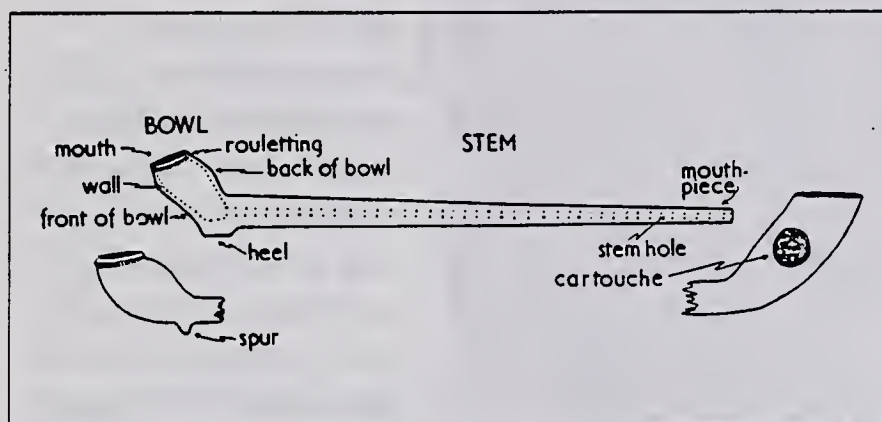
Before beginning a project, archaeologists must know what they are looking for and how to recover it without damage. They must have a plan for taking care of the artifacts they uncover. For every hour spent in the field, archaeologists must allow two or three hours of work in the laboratory.

Initially, every artifact that was dug up was cleaned. In those cases when an artifact was fragile or damaged from being in the ground so long, special chemicals were used to prevent further decay. The process of cleaning can be as simple as washing a fragment from a broken teacup with tap water, or it may involve painstaking hours with tiny brushes and chemicals, depending on the object's material and its history while in the ground.

Since one of the principal aims of the research was to study the Charlestown redware industry, the redware fragments from several of the sites underwent special study apart from the other, non-redware ceramics. Redwares were an important part of colonial life. These red clay pots were used in dairying, including milking cows, and making cream and butter. They were used to store different foods and to prepare and serve meals. Redwares were also used for special items like chamber pots. Chamber pots were medium sized bowls used like hospital bed pans when people couldn't use the outdoor privy or outhouse, often during the night or during cold weather.



Similar study was done on other ceramics. Non-redware ceramics can give an indication of how old sites are because certain types or designs were made for only a few decades. With both redware and non-redware pottery, efforts were made to piece together the recovered fragments. If they could fit together, the original vessel shape and how it was used could be determined..

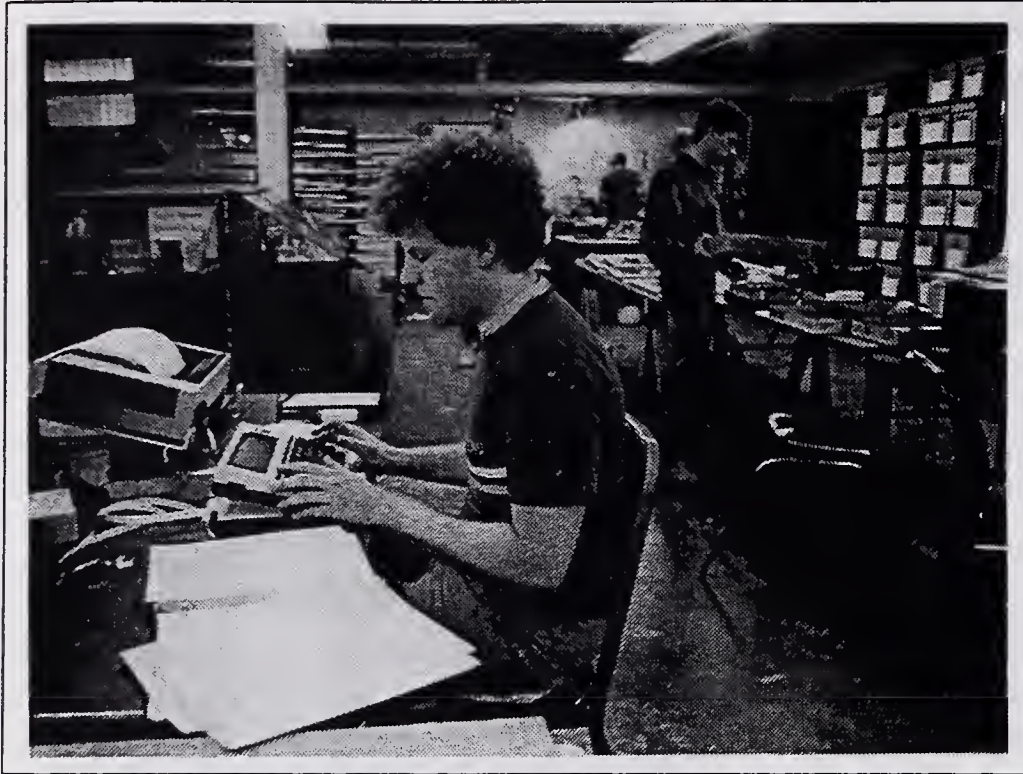


Clay tobacco pipes were studied to find out their dates and places of manufacture. These long-stemmed smoking pipes were popular, inexpensive, and easily broken. Therefore the pieces are plentiful in archaeological sites of the seventeenth, eighteenth, and early nineteenth centuries.

Glass was examined to determine its type of manufacture (free-blown, molded, blown in the mold, plate, etc.), decorative techniques, and vessel forms. Research was conducted to find out when and where the glass was made.

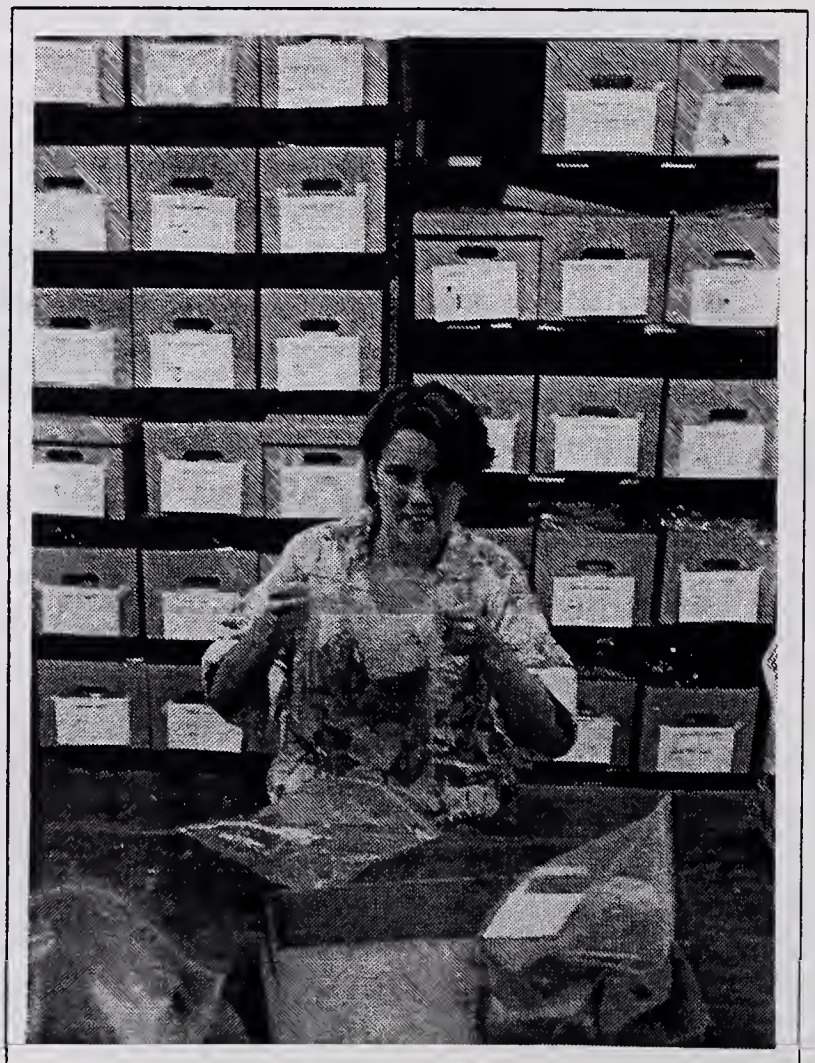
In addition to the information which can be obtained by the artifacts left on a site, soils, seeds and animal bones are valuable sources of information about the past. Soils can reveal much about what the environment may have been like when a site was originally settled. Pollen grains from plants preserved in soil samples provide valuable information about the past environments of sites. An experienced pollen analyst (or palynologist) can look at an assortment of pollen grains under a microscope and actually identify them visually. On the broad scale of prehistory, pollen can help to date sites by telling us how far the local climate has come from early postglacial semi-arctic tundra through spruce parkland and white-pine forest to the mixed hardwood and pine forest that dominates most of Massachusetts today. The presence of pollen from European food crops or medicinal herbs can help to chart the agricultural and dietary habits of the early settlers.

Faunal analysis is the study of animal remains from archaeological sites and most often involves identification of bones. It is often possible to identify both the species and the age of common food animals such as sheep, cattle and pigs. Other types of animal remains often found include fish, shellfish, birds, and even reptiles such as turtles. Choice of food animals can also indicate peoples' preferences, the availability of the animal, and sometimes the economic status of the consumers. Lobster at one time was so cheap in Massachusetts that a law was passed prohibiting "poor farms" from serving it too often.



In addition to analysis, PAL Inc. staff listed each site's artifacts into a computer database program creating a catalogue. With this catalogue specialists can research any type of material from any site or any combination of sites. The total number of artifacts retrieved from the Central Artery North sites was over one hundred thousand.

Finally, all the catalogued objects were packed in acid-free cardboard containers (since the acid atmosphere produced by conventional cardboard is damaging to many objects in the long term). They are stored in a temperature and humidity controlled environment to ensure that they would be available for future researchers.



NATIVE AMERICANS IN CHARLESTOWN

THE GLACIERS DEPART

Human beings have inhabited Boston and surrounding areas for at least 9,000 years, and probably considerably longer. As far as we know, the earliest Native Americans to live in New England arrived in the wake of retreating glaciers, sometime around 12,000 years ago. These glaciers were mile-high sheets of ice that descended from the polar regions only to retreat when climate warmed. Archaeologists refer to the time after the glaciers melted in New England as the PaleoIndian Period, the first of three periods of New England prehistory. Prehistory is the time before written records. The PaleoIndian Period extended from about 12,000 to 10,000 years ago. The earliest New Englanders are known for their beautifully worked, impressive stone spear points. They lived by both hunting and gathering a wide variety of plants. Their only domestic animal was the dog and all their tools and utensils were made of stone, bone, wood, or shell. Archaeologists suspect that each group probably traveled a wide area in search of food and favorable living conditions.

RISING SEAS

The next period is known as the Archaic, a vast stretch of time from about 10,000 to 2,500 years ago, and usually divided into early, middle, and late. An Early Archaic site dating to more than 7,000 years ago was discovered on Long Island in Boston Harbor. However many sites of the same period are suspected to have been flooded by rising sea levels that accompanied the melting of the glaciers at the end of the last ice age.

During the Archaic Period, tool types became more and more varied. Most archaeologists think the Archaic way of life relied upon a fairly specific menu of local resources, whether these were gulls' eggs, lake trout, bear meat, or hickory nuts. The Archaic period saw development of the atlatl, or spear thrower, a device that allowed the hunter to increase both the range and the force of the thrown spear. Ground stone tools and ornaments also made their appearance during this period. The remains of deep-water fish on some Massachusetts sites tells us that people were traveling considerable distances offshore in pursuit of marine resources. Many archaeologists think that the peoples of the New England Archaic used a system of base camps from which smaller parties fanned out in their search for food and materials.





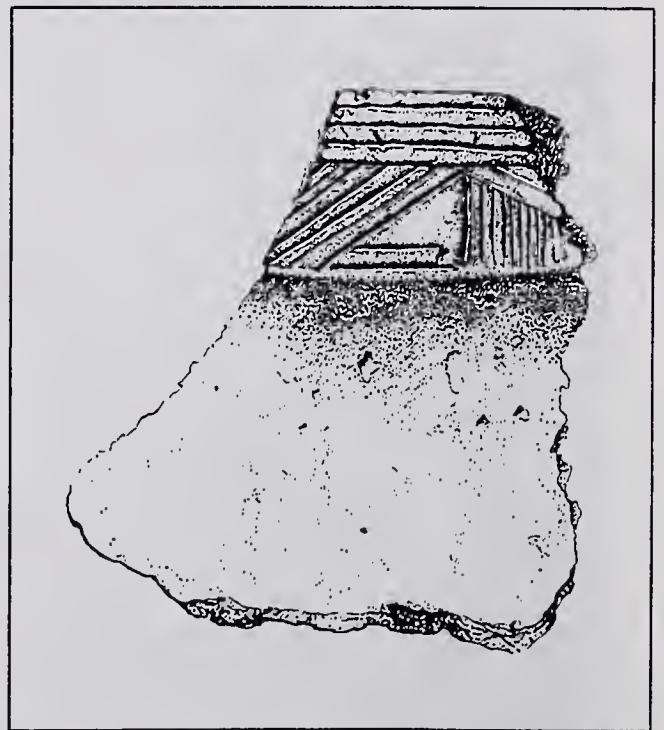
POTS AND ARROWS

The Woodland Period, from about 2,500 to 500 years ago, was marked by several noteworthy changes in culture and technology. The first was pottery making, a great convenience for cooking and storage of foodstuffs. This was followed, in stages, by a variety of crop-planting activities, from simple horticulture to true crop

cultivation. Finally, the use of the bow and arrow brought true arrowheads into use for the first time. The bow and arrow represented a definite advance over the spear or atlatl, both in range and in energy efficiency.

CONTACT

By the time Governor John Winthrop and his Puritans arrived in Charlestown in 1630, the local Native Americans were living in fairly large, semipermanent villages surrounded by fields. They were members of a large confederacy of speakers of the Algonquian languages, whose territories extended along the east coast of North America as far south as the Carolinas. Although speakers of Iroquoian languages had pushed into New England from the west, the Algonquians of the coastal regions were the heirs of a tradition that had developed in place for over 10,000 years. It was a tragedy that these unique cultures were nearly wiped out in a few decades, the result of diseases and colonial expansion practices.



THE EUROPEANS ARRIVE

BETWEEN THE MYSTIC AND THE CHARLES

On July 6, 1630, John Winthrop and the 700 Puritan colonists of the Massachusetts Bay Company arrived safely in the New World. They landed first in Salem, where there was an existing settlement under the leadership of Captain John Endicott. The original site for the colony proved unsatisfactory, however, and search parties were sent out to look for a new location. They settled on a spot between the Mystic and Charles Rivers and named it Charlestown to honor the English king, Charles I.

The summer of 1630 was not a comfortable or a healthy season on the peninsula. Many settlers fell sick and some died. Furthermore, it quickly became apparent that supplies of drinking water were not entirely adequate. Ultimately, the colonists decided that, rather than live in a single location, they would disperse in a number of smaller settlements. By the end of 1630, there were only thirteen settlers in Charlestown. The community did not grow large enough to support its own church until 1632. Prior to that time Charlestown residents commuted to the First Church in Boston by ferry.

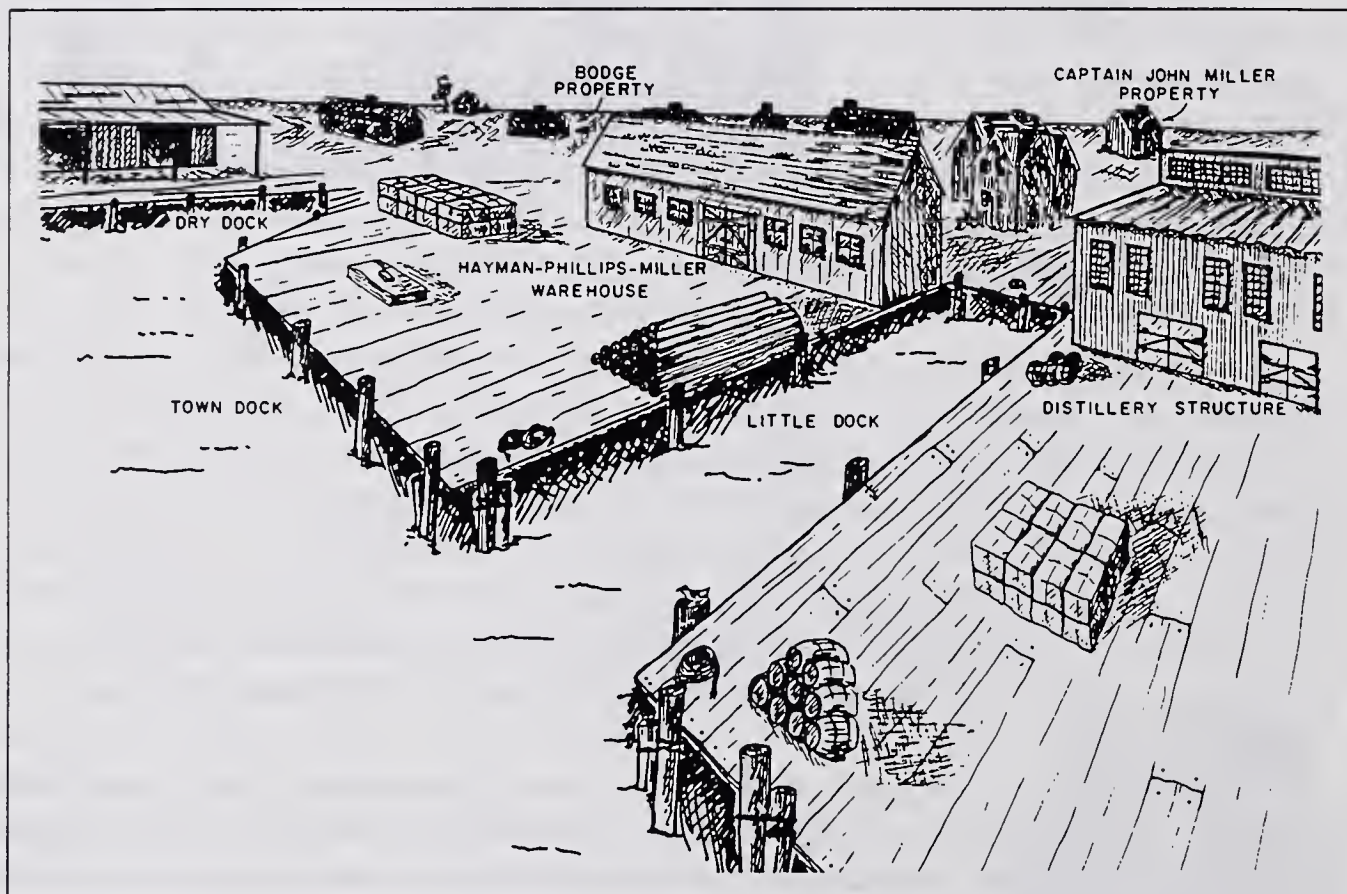
Conscious of their destiny as founders of a new society, the Puritans came equipped with a plan for their city, prepared for them by an engineer named Thomas Graves in 1629. At Charlestown, a fort was built on the top of the hill (later Town Hill) for defense. Streets were laid out around the hill's base in an elliptical pattern, with two-acre plots on each side of the street. In this original plan, the remainder of the peninsula was reserved for agricultural purposes. The town's principal building, called the Great House, was intended to serve as both the residence of the Governor and other prominent members of the Massachusetts Bay Company, and the community's first meetinghouse.

Charlestown during this period shared many characteristics with Boston, among them a dependence of its growing population on foodstuffs from farms outside the peninsula. To serve this need, the General Court in Boston granted Charlestown large tracts of land south of the Mystic River in what is now Somerville and north of the Mystic in parts of present-day Medford, Woburn and Malden.

The existence of Charlestown's protected harbor, and its place in the larger Boston Harbor, gave the settlement a maritime focus from the beginning. By 1640, coopers, who made barrels, ropemakers, anchorsmiths, and other tradespeople connected with seafaring were clustered along the waterfront. There, too, were the town's first wharves, usually built by private landowners.

An important development in the history of Charlestown's waterfront was the construction of a dry dock in 1678. A dry dock is a slip in water that can be emptied once a ship has entered. The town had long needed a dry dock "for taking in of ships and vessels for repairing underwater," as "several ships and vessels have miscarried and more suffered great damage" for lack of such a facility. The project was undertaken by a group of private investors, encouraged by the fact that the General Court had granted them a short-term monopoly on such a structure.

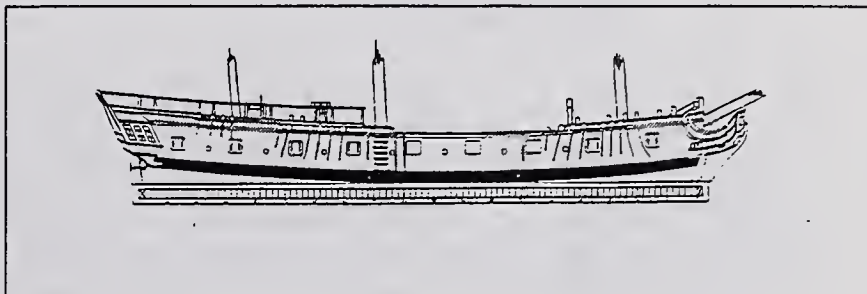
Early Charlestown residents were an active group, ready and willing to protest perceived injustices. In 1688-89, they took an active part in the arrest and expulsion of the detested English governor Sir Edmund Andros. This was a period when the town was described by a contemporary source as "the most ill-affected, distracted and divided in the country."



THE EIGHTEENTH CENTURY, 1690 - 1775

During the eighteenth century, Charlestown's history echoed the pattern of New England. In general, seaports grew while farming towns declined. Nevertheless, New England's exports to the mother country (such as whale oil and potash, a product derived from the burning of timber) could never equal the value of its imports, creating a trade imbalance.

However, New Englanders discovered a silver lining of sorts. Their relative closeness to the West Indies gave them a competitive advantage in providing provisions to the islands, which were rapidly being converted to the plantation system. Charlestown participated actively in this trade, ranking fifth behind Boston, Marblehead, Salem and Newburyport among Massachusetts' commercial centers. The town soon qualified as an entrepot, a term borrowed from the French word for a warehouse and used to designate a center for the commercial distribution of goods. Since ships returning from the Indies often carried sugar from the plantations and/or the hides of cattle slaughtered for food, secondary industries such as tanning, leather working, sugar refining, and the distilling of rum from molasses sprang up near the waterfront.



Inevitably, as the town's population grew, settlement increased in density and extent. Nevertheless, the part of town that would one day become the Central Artery North project area remained the primary center of activity and contained Charlestown's most valuable real estate. The Town Dock at this period was transformed from a marshy inlet to a maritime facility that was a patchwork of municipal and private ownership.

In addition to its maritime commerce, Charlestown had another resource for which it was perhaps even better known. Along the Mystic River lay extensive deposits of blue clay, silted down from the outwash of the long-departed glaciers. New England's first documented potter worked in Charlestown using this clay, and the town became a major center of ceramic manufacture. It was logical, too, that potteries should cluster around the waterfront, water transportation being preferred for the transport of such fragile commodities. Charlestown potters are known to have shipped their wares as far south as

Connecticut and as far north as Maine. Unfortunately, very few identifiable examples of their work have survived, partly because the makers rarely bothered to mark it. It was also very common and easily broken.



During this period wars including King William's War (1689-1697), Queen Anne's War (1702-1713), and the War of Jenkins' Ear (1739-1741) resulted in decreased production of manufactured goods and increased taxes to finance the wars. A document of 1754 stated:

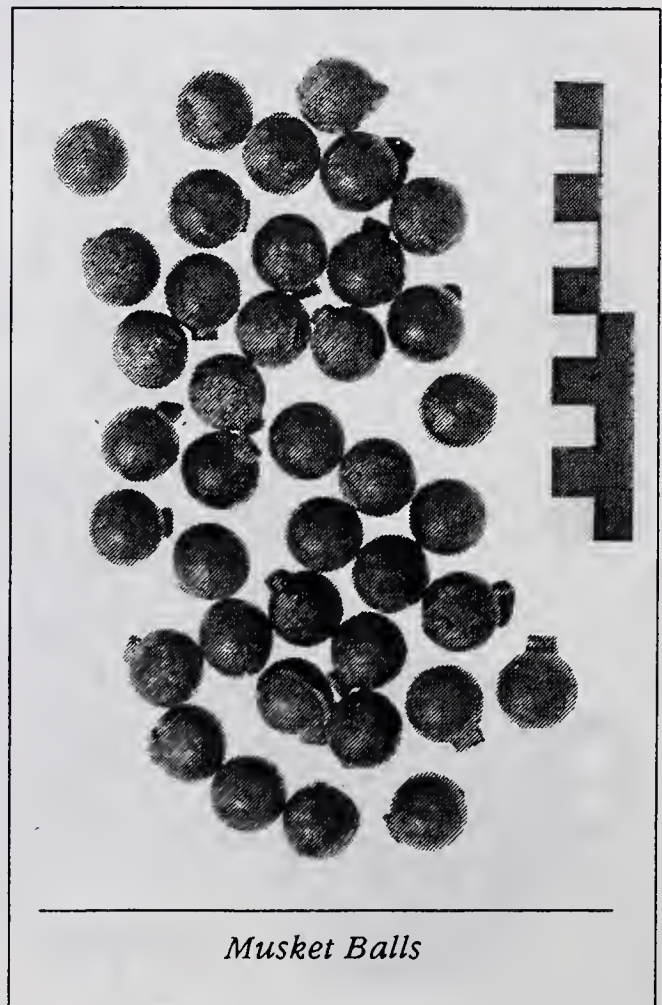
The circumstances of this town are growing worse every day by a decay in trade, occasioned by great and heavy losses at sea. Also by an increase of many poor widozws, occasioned by the death of our seafaring men, many of whom died in a miserable captivity in [the recent wars].

When the Seven Years' War broke out in 1756, the center of the sea fighting shifted to the south, recruitment continued to drain manpower, and an economic downturn resulted from the loss of military contracts. Depressions occurred in 1763 and 1771. By 1774, New Englanders had the lowest per capita income in the Colonies. A predictable side effect was the concentration of wealth in the hands of the few. The gap between the net worth of the wealthiest citizens and the poorest, which had been only twenty to one in 1657, rose and rose again. Like Boston during this period, Charlestown found that its poor were so many that they could not be accommodated in households of family or friends. Almshouses were established for the first time. It was upon all these dissatisfactions that the rebellion of the Colonies fed in 1775.

THE BATTLE OF BUNKER HILL

On April 19, 1775, citizens of Concord and Lexington engaged and defeated British troops in the first armed conflict of the American Revolution. The English General Gage retreated with his demoralized troops from Lexington and Concord to Boston, one of the first acts of the rebellious Minute Men was to place Boston under virtual siege and to fortify Breed's Hill in Charlestown.

On the 17th of June, General Gage launched a retaliatory attack on Charlestown from Moulton's Point, coupled with artillery fire from the harbor and from Copp's Hill in Boston. Built largely of wood, as were all eighteenth-century towns in the New World, Charlestown was almost immediately set afire. Nearly four hundred buildings, valued at over a hundred thou-



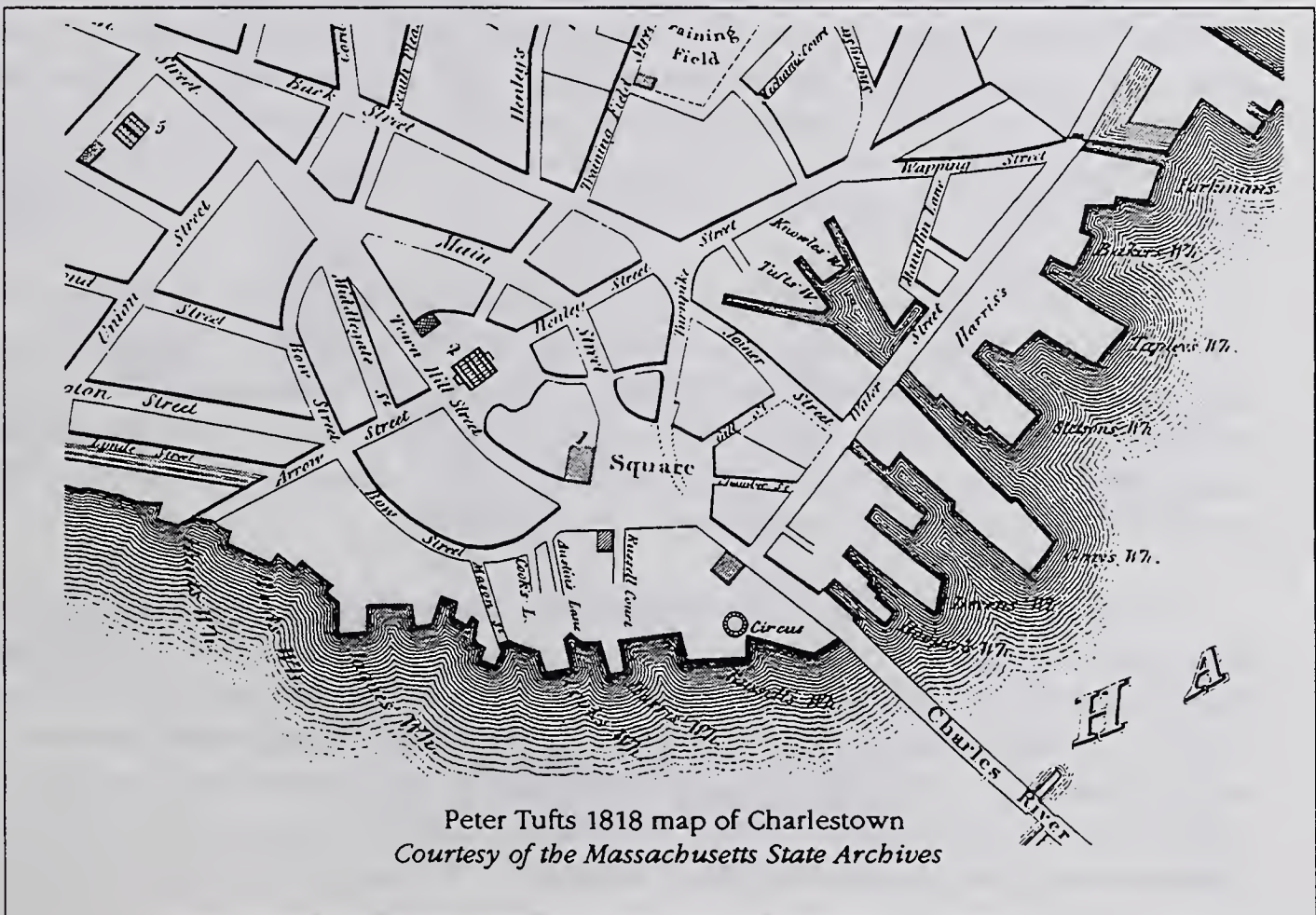
Musket Balls

sand pounds, were destroyed. Two thousand persons were left homeless and destitute. Time, however, was not on the side of the British. By the spring of 1776, General Gage had left Boston on a day still celebrated locally as Evacuation Day. Charlestown's citizens began the task of rebuilding. It was slow work. In 1771, the town had taxed over five hundred households; in 1777, the figure was only one hundred seventy-two.

RISING FROM THE ASHES

The new town was rebuilt following essentially the same plan as the old one. The most significant change in the wake of the fire was the clearing and conversion of the Town Square, site of the Great House/Three Cranes Tavern, into an open market area. It was renamed Charlestown Square. In addition, Water and Wapping streets were straightened and widened and other wide, straight streets, with right-angled intersections, were laid out along Main and High streets.

Charlestown was still a port city. Now that it no longer labored under British trade restrictions, its fate would depend largely on free trade, both regional and international. Charlestown expanded rapidly during this period, nearly doubling its population between 1790 and 1800 and adding over seventy new buildings. Both population and the number of structures on the peninsula doubled again in the next decade, and population by itself doubled yet again by 1820.



Charlestown lost some of its peninsular isolation with the opening of the first bridge between it and Boston in 1786. Early in the nineteenth century, the General Court established a state prison on the southwest corner of the peninsula, and the United States Navy Yard on sixty-five acres of the peninsula's southeast corner. Today, the Navy Yard is home to the U.S.S. Constitution, known to millions as Old Ironsides, the nation's oldest commissioned warship. The Central Artery North project area was left largely to the working class as the wealthier merchants and tradespeople sought more genteel neighborhoods around Town Hill and the Bunker Hill Monument.

CHARLESTOWN IN THE NINETEENTH CENTURY

Charlestown's industries were healthy and active during the early years of the nineteenth century. Important products were bricks, tanned leathers (especially the newly popular Morocco), cordage and twine, soap and candles, and rum. Then on the morning of August 28, 1835, the fearsome cry of "Fire!" rang out. Starting on the Town Square, the fire swept through a large portion of Charlestown's downtown and waterfront areas. In the fire's aftermath, a committee was formed to evaluate laying out new streets and "widening, altering or discontinuing old streets." As part of the new plan, the Town Dock was to be filled in, a matter that had been under consideration even before the fire.

In the mid nineteenth century, Charlestown's population continued to increase, reaching 10,000 by 1840, 17,216 in 1850, and 25,065 in 1860. This was the period of the great melting pot. Religious denominations multiplied, racial composition diversified, and above all, Charlestown became a favorite destination for refugees from famine and political persecution in Ireland. On arrival, the newcomers tended to congregate in the working-class neighborhoods along the waterfront.

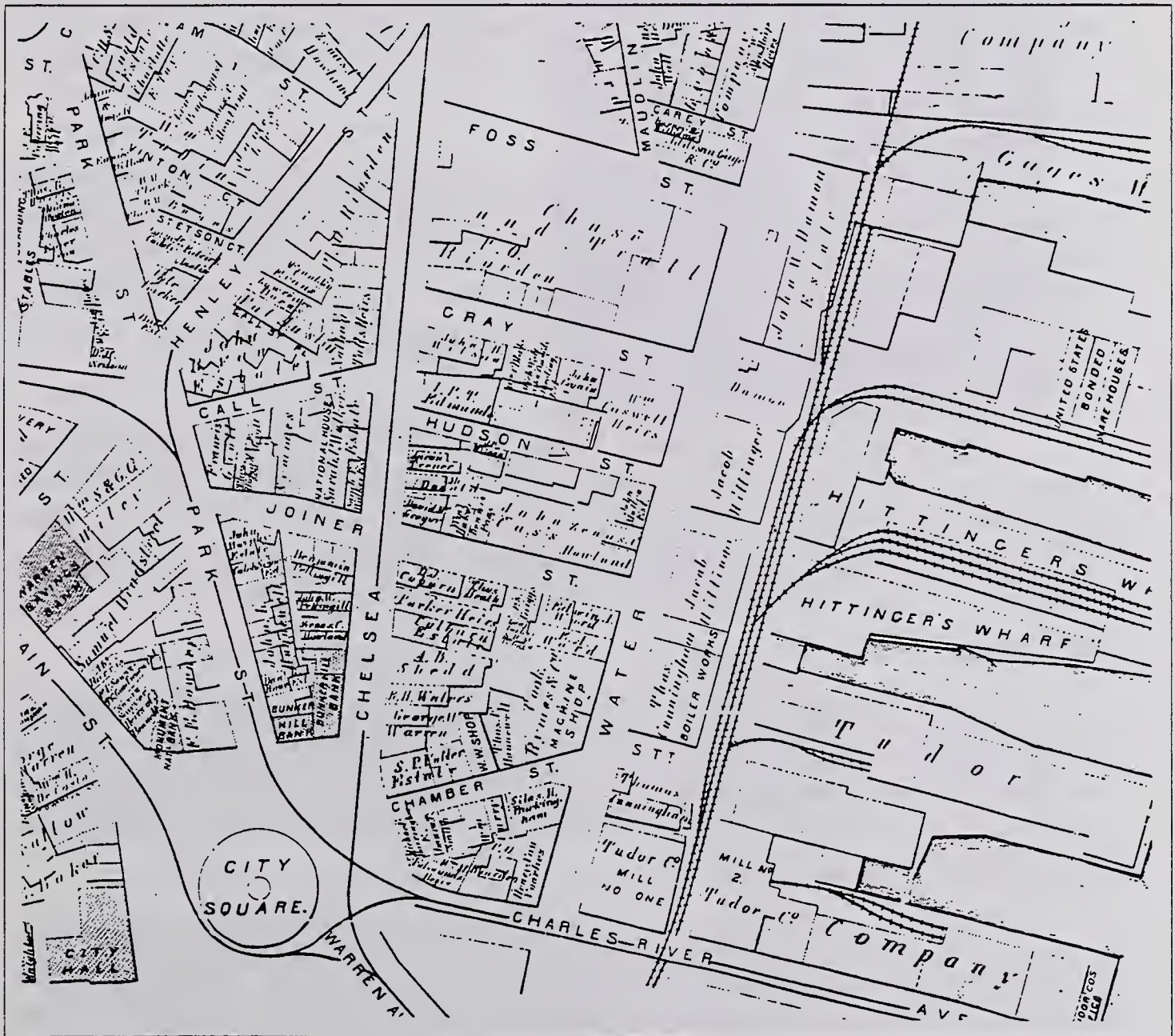
In 1843, Charlestown set aside its Puritan-instituted town meeting and selectmen in favor of a mayor and city council. By this time, wage labor had become the dominant type of occupation, replacing the late medieval system in which apprentice, journeyman and master craftsman were closely connected and employees boarded with employers. Transportation improvements made it possible for middle-class citizens to live at a distance from the workplace, in new residential neighborhoods.

In the Central Artery North project area, retailing, storage, and manufacturing continued as before, but residential housing was scarce. Charlestown Square, now renamed City Square, remained as the town's civic center where the city's first bank was built. Hotels and boarding houses soon clustered around the Square as well. Metal working, blacksmithing, and furniture making were on-going. Steam power was available, but most operations relied on the relatively less efficient hand and horse power. Small firms produced sofas, clothing, pipe and block tin products. Transportation-related businesses

of the period employed teamsters, liverymen, truckers, wagoners.

Talk of merging Charlestown with Boston began as early as the 1850s, and became a reality in 1874. This annexation formalized what had been custom for many years.

The Central Artery North project area has had an active history of industrial and commercial development. With all the associated digging, dumping, and filling, it is indeed fortunate that any significant archaeological remains survived in this heavily developed core area.



G.M. Hopkins 1875 map of Boston
Courtesy of the Massachusetts State Archives

THE ARCHAEOLOGY OF CHARLESTOWN

THE TOWN DOCK POTTERY PREHISTORIC SITE

The oldest site found within the highway corridor project area was the Town Dock Pottery prehistoric site. There was nothing to suggest during the initial archaeological testing that a prehistoric site could be found there. But in June 1987, when PAL archaeologists began work on the historic site known as the Town Dock Pottery, they quickly ran across something unexpected: an intact deposit of prehistoric remains on the eastern half of the historic site. The archaeologists immediately stopped work and notified the State Archaeologist of their find. The State Archaeologist determined that the site was of sufficient significance to merit the effort of excavating it scientifically, and a prehistoric specialist was assigned to direct the excavation.

What the archaeologists found proved to be a small prehistoric campsite situated on what was once a small hill between two streams. This had been part of the Charles River estuary. The site's occupants had cleared three small areas and dug shallow pits. These showed up in the soil as areas of altered soil color and texture. These pits may have contained fires for warmth, light, or cooking as suggested by the presence nearby of fire-cracked rock and charcoal staining.

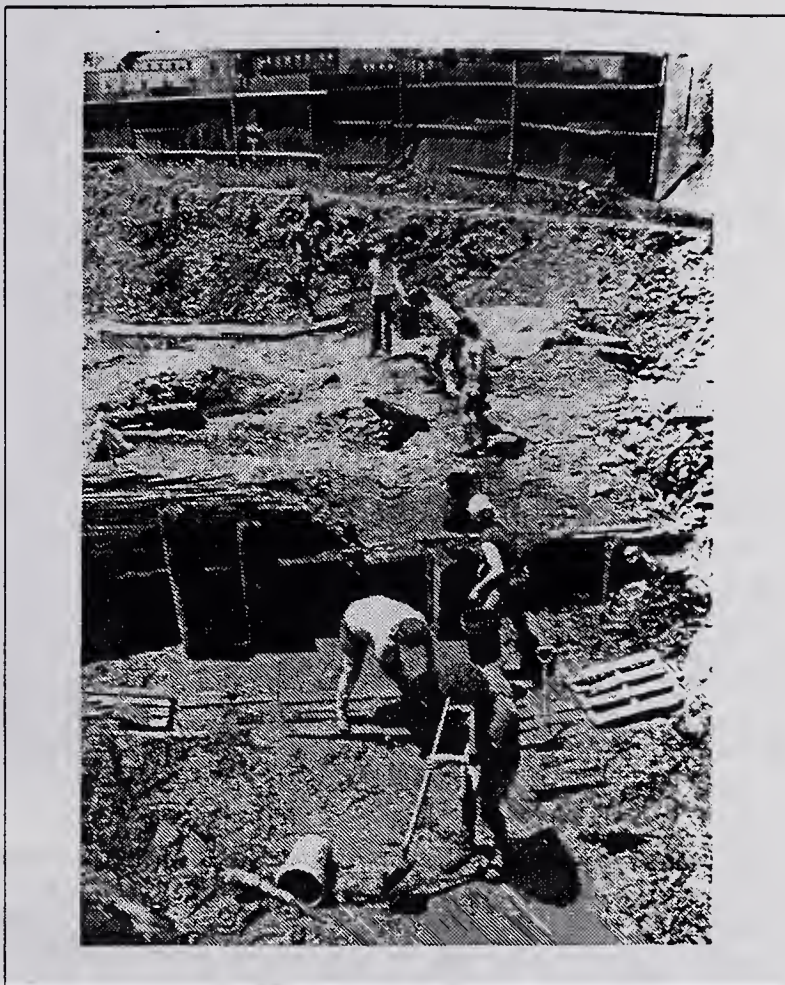
While at the site, the occupants also spent some time manufacturing tools from stone they had brought with them. The stone may have been obtained by the Indians from an area now known as the Middlesex Fells reservation north of Boston. After a short period at the site, the group probably gathered up its possessions - perhaps a few stone or wooden tools, some fish or fowling nets, some spare clothing packed in baskets or skin bags - and moved on.

Laboratory analysis of the stone flakes from the site yielded some further insights into the activities that went on there. Technical aspects of flake size and shape suggested that the work done there was fine finishing. In other words, they were adding the finishing touches to blades that had been made somewhere else, or that they were resharpening tools which were being repeatedly used.

Upon examination, the single finished tool found at the site was classified as a triangular end scraper and appeared to have been manufactured from a broken projectile point, or "arrowhead". Scrapers are thought to have been used to clean the fat off the skins of animals or other similar tasks. Triangular end scrapers very similar to this one have been found in other New England sites which date to the Terminal Archaic/Early Woodland Periods. The PAL archaeologists believe the most probable date for the site is between 3000 and 2000 B.P.

***THE WATERFRONT SITES:
THE TOWN DOCK WHARVES/DRY DOCK***

In both the Town Dock Wharves/Dry Dock and Town Dock Pottery Sites, portions of Charlestown's historic Town Dock were found, buried beneath several feet of modern fill. Made up of a scattering of large timbers in the ground, notches, tree nails, and tie-backs, the sites certainly did not appear either beautiful or meaningful. Yet the archaeologists were able to use this information to make an impressive reconstruction of the wharves in their original form and to draw some significant conclusions about them.



In the early seventeenth century, the wharves were simple timbered banks, later improved and expanded. In 1674, a group

of local merchants and manufacturers became shareholders of the Dry Dock, built on the western side of the Town Dock. By the mid-eighteenth century, warehouses, residences and craft shops, especially potteries, surrounded the perimeter of the wharves and docks.

The Town Dock Wharves and the Dry Dock, the first dry dock in North America, were important to Charlestown's economy and character, from the beginning. The wharves themselves were an example of traditional craftsmanship. They were built by workers for the most part without benefit of style books, manuals, or blueprints. Their know-how, experience, and tradition were the guiding principles of construction.

The Town Dock Wharves/Dry Dock Site as a whole demonstrated the great variability in Charlestown's wharf technology. The earliest wharf remains bore a strong resemblance to British medieval models. The later reconstruction harked back in some of its elements to examples known from Roman London but also incorporated up-to-date techniques being introduced in New York after the American Revolution. The wharfing types employed, the wood joinery and pegging or lack of it, all had venerable histories.



Different craftsmen might prefer one technique over another, but the techniques all had one thing in common- they worked, and had done so for centuries. The mixture of tradition and innovation that characterized the larger aspects of Charlestown's economic life were clearly reflected in the excavated portion of the Town Dock Wharves/Dry Dock Site.

The Town Dock Pottery's wharf face consisted of an upper, hewn timber face supported by vertical, square-hewn piles. The

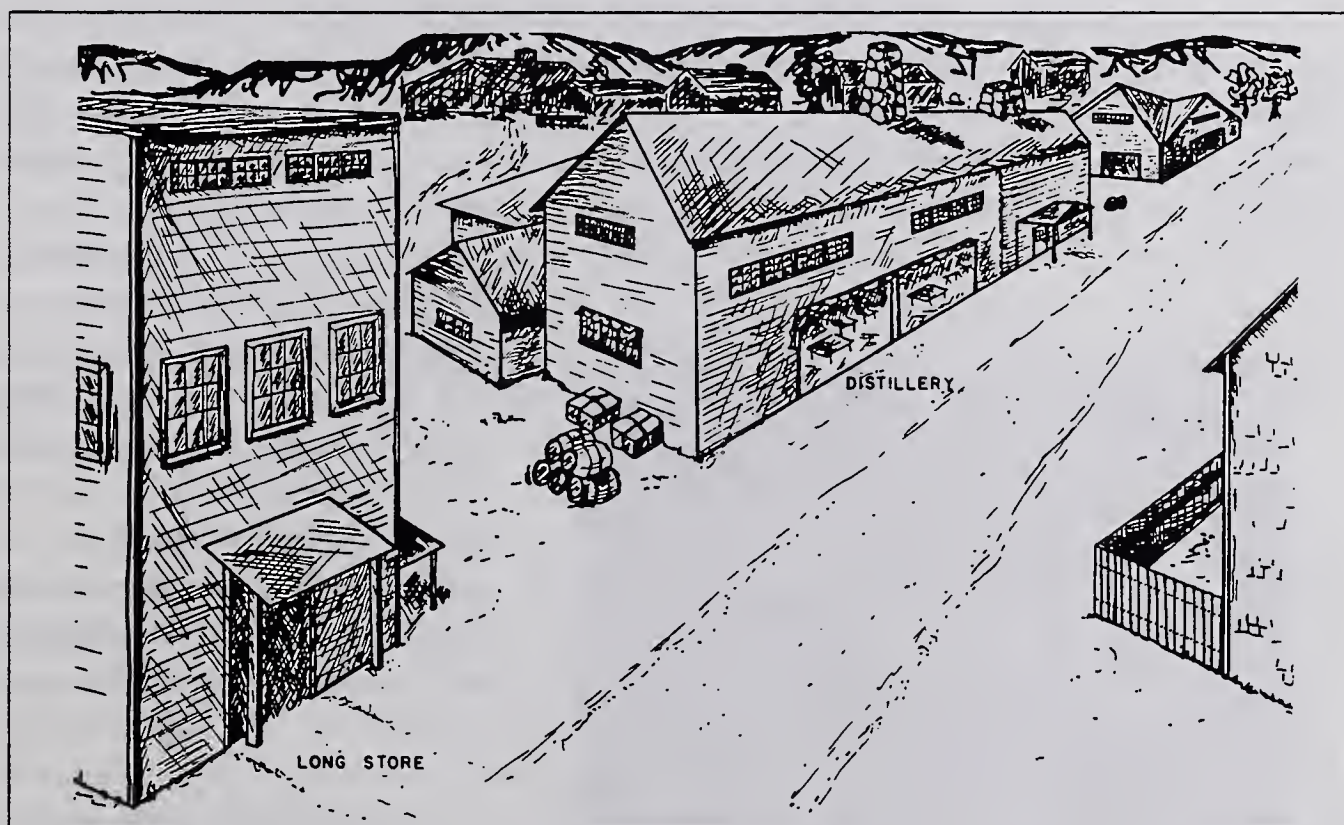
structure differed from that excavated at the Town Dock Wharves/Dry Dock Site in that it had some internal stabilizing features and the wharf end was comparatively poorly built. The corduroy road, which provided a firm dry walkway over marshy ground, was constructed of stacked sticks and small logs. Both it and the wharf structure were dated to the early nineteenth century. The wharf was filled by 1836.



THE HENLEY DISTILLERY SITE

Just a block to the east of the waterfront sites was the Henley Distillery Site. This was the documented location of a colonial, and later nineteenth century rum distillery. Interest in this site focussed on the role played by rum distilling in Charlestown's regional and international economy. The Caribbean trade provided molasses as the distillers' raw material. The art of distilling alcohol has been known since early medieval times, yet little was known of the specific methods used by commercial distilleries of the eighteenth and nineteenth centuries, of their equipment or the layout of their facilities.

The archaeologists were aware that at least two distilleries had occupied this lot. The first distillery was constructed by Capt. Samuel Henley sometime after 1741. It was built on land that had belonged to the Smith family. Henley was a prominent citizen of Colonial Charlestown. His distillery was destroyed in 1775 during the burning of the town by the British, and it is not known whether he operated a reconstructed facility after the fire. In either case, the lot was bought by Aaron Putnam and Moses Hall in 1789 and by 1791 it was said to contain "a large distillery store and other appurtenances." In the early nineteenth century, the Putnam Distillery came into the possession of Jacob Foss, but ceased operation by 1868.



The distillery-related features identified in the initial archaeological survey turned out to date, not from the pre-Revolutionary Henley Distillery, but to one of its successors. This was revealed by the nature of the fill inside two large vats uncovered, which was of later nineteenth-century origin and must have been deposited at the time of the final

shut-down of the Foss Distillery. The archaeological features on the site consisted largely of banks of subsurface storage vats (made from local white pine and spruce) and the system of retaining walls that supported them, together with firebox foundations and elements of a wooden trough or drain system. The features did, despite their later date, provide future investigators with valuable comparative information on the layout and processes of a nineteenth-century rum distillery.



THE SMITH SITE

The prehistoric site that was hidden beneath the Town Dock Pottery Site was by no means the only unexpected development of the Central Artery North Reconstruction Project. The archaeological crew discovered another in the southeast corner of the Henley Distillery site. The site had been concealed beneath a layer of blue clay, which, in the Boston area, is usually an indication that the archaeological excavation has gone as far as it needs to. The blue clay dates to glacial times, before the first humans entered

the area. In this case, however, the underlying blue clay was revealed as a thin, artificial layer sealing a deposit of previously unsuspected historic-period soils beneath it. The blue clay in this case had apparently been spread over the site in the process of readying it for a new phase of distillery construction.



As with the finding of the prehistoric site, the archaeologists immediately stopped work, notified the State Archaeologist of their find and at her direction

performed additional archaeological work. Information collected during the site-examination phase revealed that the site's pre-distillery residents had been the family of John Smith, Sr., a shipwright who emigrated to Charlestown sometime before 1644.

The "Old" House and the "Now" House

On the part of the lot now renamed the Smith Site, historic documents revealed that the family had had two houses, referred to as the "old" dwelling house and the "now" dwelling house (built around 1670). According to these records, there was also a separate outbuilding that probably served as the workshop for the family business.

The site's main archaeological feature was a round hole, approximately 9 feet in diameter and 6 feet deep that had been dug into the clay subsoil. It was filled with the debris of local shoemakers and potters. The fill included two intact barrels. Evidence indicated that the hole had been created as a buttery, or underground cool-storage area used by the Smith family and originally reached by a trap door. The thin loam surrounding the house showed no signs of cultivation, nor did it contain any remains of trash heaps, privies, or other features that might have shed more light on the lives of the inhabitants.

The greatest challenge at the site was the removal and stabilization of one of the two water-logged barrels found inside the buttery of the Smith house. Barrel-making techniques of this period are of considerable interest to archaeologists because so little is known. It was therefore highly desirable to preserve the barrel for further study. PAL Inc. called on the services of a well-known conservator specializing in objects from submerged sites such as historic shipwrecks. The conservator and PAL Inc.'s laboratory director devised a program for preserving the barrel. They applied a cast wrap to the barrel before transporting it to the PAL Inc. laboratory, where it was treated to remove salt and other chlorides that had contaminated the site's soils. After this stabilization effort, the barrel was coated with chemicals to preserve the internal structure of the wood, and finally freeze dried.

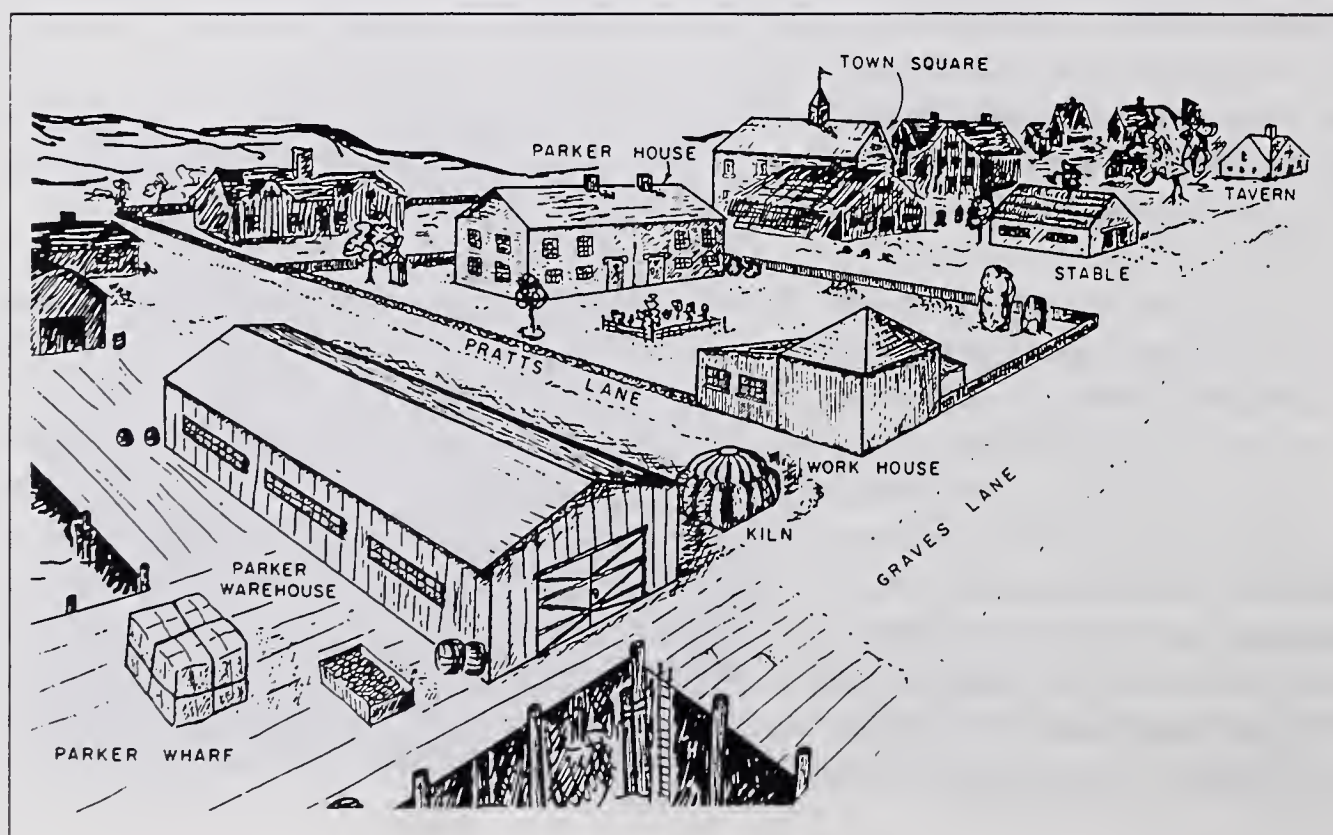
When analysis of the field and laboratory work at the Smith Site was completed, the investigators had a picture of three generations of Charlestown shipwrights who lived on the site between the mid seventeenth century and the early eighteenth century. After a prosperous beginning, the Smith family does not appear to have done well. There was a history of sudden and early death, with property often left to minor children. The archaeological evidence showed that the Smiths lived lives of great frugality, either because they chose to or because they had to. The sparse ceramic remains they left behind consists largely of locally made redware, the least expensive ware of the time, with small amounts of imported stoneware and earthenware. Their lives were in considerable contrast with those of the Long family, whose tavern and dwelling house were within the City Square Archaeological District .

THE POTTERY SITES

Earlier archaeological work had indicated that the Central Artery North Reconstruction Project was likely to disturb archaeological remains of four potteries that once manufactured Charlestown redware. This expectation was quite reasonable based on the findings of the earlier test excavations. However, neither the Ingalls-Penny Pottery Site, occupied from about 1740 by James Ingalls, nor the post-Revolutionary Newhall-Runey Pottery turned out to be where the archaeologists expected them to be. This was due to one of two reasons. Either the early descriptions of the lots were too vague, or impacts of nineteenth and twentieth century construction destroyed the sites.

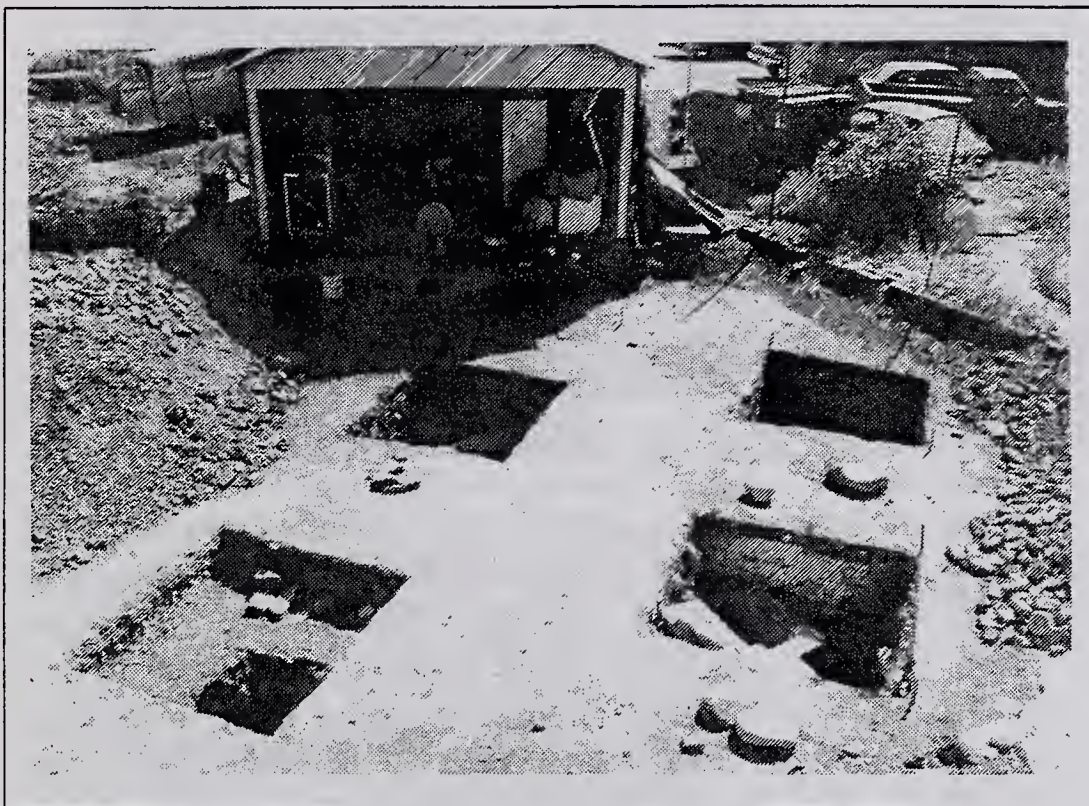
The Parker-Harris Pottery Site

In contrast to the two sites that weren't found, the Parker-Harris Pottery Site was located and excavated. The site was found within the courtyard at the rear of the YMCA building at 32 City Square, very close to the City Square Archaeological District. It had been the location of a redware pottery operated from 1715 by Isaac and Grace Parker. In the 1740s, the Parkers conceived an ambitious project that was significant for the history of pottery in New England. They attempted to start the first commercial operation to produce local stoneware, a harder, more durable type of pottery that also had the advantage of not requiring an unhealthy lead glaze. Following Isaac's unexpected death in 1742, his widow Grace continued the project, and although she was not ultimately successful, she stands out in the commercial history of the time as a resourceful and persistent businesswoman who fought to balance the demands of motherhood against those of the marketplace.



After Grace Parker's death in 1754, Josiah Harris operated the redware pottery between at least 1767 and its destruction by fire during the Battle of Bunker Hill in 1775. He claimed losses of two hundred pounds for his buildings. Josiah's postwar financial difficulties led him to sell a portion of the property to a wealthy relative, John Harris, in 1783. John then constructed a three-story house on the property. By the 1830's, the John Harris house was converted into a hotel-tavern called the Middlesex House.

In 1866, the opulent Waverly House was build on the site, later to be replaced by the YMCA building in 1917. The hotel symbolized the economic prosperity brought to the city by railroads and a continuing maritime commerce. Now demolished, the hotel was still standing at the time of excavation in 1986.



The archaeologists concentrated their efforts on exposure of the site's northeast corner, which was confined between the rear wall of the YMCA and the brick foundation of the post-1866 Waverly House Hotel.

Excavations revealed early wharves in this location, possibly dating from the time when the Parkers operated a pottery on the site. The greatest amount of material recovered from the site related to the Parkers, although a seventeenth-century stone wall from an earlier dwelling house was also uncovered. The undisturbed northeast corner of the site contained a layer of greenish gray clay. This layer was identified as part of the original surface of the pottery during the period when Grace and Isaac's son John Parker was working for his mother in the early years of her widowhood. It contained rich deposits of redware sherds, kiln brick, "wasters" (pottery products broken or found to be defective after manufacture), broken clay tobacco pipes, and "kiln furniture" (rough ceramic forms used to stack pieces to be fired in the kiln). These materials were found mixed in with a broad range of other remains, including bones, sherds of imported ceramics, metal items, and glass from bottles and windows.

The redware remains from the site were of great interest to the archaeologists, since it was almost certain that they were remains of the Parker family's pottery. PAL Inc. staff conducted analysis of the site's redware, identifying a total of thirty-one vessels. These included dishes, storage pots, pudding pans, plates, milk pans, porringers, a basin, a bottle, a caudle cup (a two-handled cup often used for feeding invalids), a jug, a mug, a platter, and a saucer. They were decorated using a variety of techniques, some being glazed on the inside only, some on the inside and outside. All redware glazes were lead-based, sometimes with addition of minerals such as manganese and iron oxides to add color to the glaze.

The site as a whole provides a glimpse at the way historically documented trends may be given added dimensions by actual, on-site archaeological investigation.

The Town Dock Pottery Site

The Town Dock Pottery Site was thought to be one of several potteries that were established at the head of the Town Dock/Dry Dock during the days of Charlestown's redware pottery industry. This area was attractive to potters for a variety of reasons, including the nearby water transportation. By the early eighteenth century the city placed restrictions on pottery locations for several reasons. Their kilns were sources of excessive heat in the summer, they produced harmful fumes all year, and they were considered a constant fire hazard.

The archaeologists knew that the site could have been occupied by any one of several potters active in the area. Particular individuals might have been Battery Powers, Daniel Manning, and Jonathan Penny, who has already been mentioned in connection with the Ingalls-Penny Pottery. Testing had confirmed the presence of deposits containing redware wasters and other evidence of pottery activity, though not of any actual kiln sites. The archaeologists did find wharf remains associated with the Town Dock, and remains of a tannery associated with Charlestown's leather industry. The tannery operation was carried on by members of the Tufts family, one of whom was the father of the founder of Tufts University.

PAL Inc. archaeologists began the work of removing fill layers in order to reach significant deposits. The eastern portion of the site proved to contain some fairly extensive wharfing, including the remains of a corduroy roadway along the edge of the wharf on what had been its landward (east) side. Fills related to pottery operations were also found.

The excavations recovered thousands of artifacts from the fill layers related to pottery activities on the site. The presence in those layers of artifacts datable to the period after the Revolution and before the filling of the wharf clearly suggested that the nearby pottery activity had taken place, at least in part, after the destruction of the majority of

the redware potteries in the fire of 1775. Of the three potters known to have worked in the immediate vicinity, only Battery Powers and Jonathon Penny rebuilt their kilns and carried on with the trade after the fire. Geography suggests that the potter may have been Jonathan Penny, his supposed location having been somewhat closer to the Town Dock than that of Battery Powers. However, the evidence was not sufficient to make a firm identification. What *was* clear was that this site represented the post-Revolutionary period of Charlestown's decline as a redware center. As a result, the objective of examining the pottery output of Jonathan Penny, which proved impossible on the supposed Ingalls-Penny Site, was actually accomplished here, at the Town Dock Pottery.



One of the most striking contrasts between the redware collection from the Town Dock Pottery, as compared to that from Parker-Harris, was in the color of the glazes. Whereas a third of all the Parker pieces were either black or dark yellow-brown in color, slightly less than 10% of the Town Dock Pottery pieces fell into those two categories. Another striking difference was that the Town Dock potter, whoever he may have been, left a least a quarter of his pieces unglazed, while the Parkers glazed all but 6% of theirs. That the Town Dock potter used more individual colors in his glazes probably represents the wider availability of glaze ingredients after the war. The Parkers may have relied on treasured family recipes for achieving special effects with a relatively limited list of ingredients.

Twenty individual vessels were identified from sherds in this collection, including storage pots, mugs, bowls, a caudle cup, a dish, a milk pan, and a possible chamber pot. There was little evidence of refinement of form or decoration in this collection. On the contrary, the redware analysis suggests that the Town Dock Pottery was making a more limited assortment of pottery forms of a distinctly lesser quality -- a conclusion that once again illustrates this period of the redware industry's decline. Within a few decades, the emphasis would shift to the more successful stoneware potteries at other locations in Massachusetts such as Taunton and Danvers. Potteries were simply no longer welcome in dense urban neighborhoods.

THE CITY SQUARE ARCHAEOLOGICAL DISTRICT

In a very real sense, the history of Charlestown's earliest days is the history of City Square, for it was on this spot that Governor Winthrop and his Puritans erected their first timber building. This was the so-called Great House, begun under the direction of engineer Thomas Graves before the arrival of the colonists in 1630. The Great House served many purposes for the little community. It was the residence of the Governor, the



seat of government, and also, in a fusion of church and state which the Puritans found perfectly appropriate, it was the center of worship.

The period of the Great House's official use was short. When the Governor and the majority of the colonists moved to the Shawmut Peninsula (Boston) in search of healthier conditions, the building was bought from the Massachusetts Bay Company by the General Court. Charlestown's citizens continued to use it as the community's meetinghouse until 1635. At that time it was sold to Robert Long, who is described as an "innholder" from Dunstable, England. Long was granted the right to occupy a part of the premises, pending the construction of another, larger meeting house on the slope of Town Hill facing the square.

In 1638, a year before the Longs took full possession of the building, a traveler named John Josselyn visited Charlestown and recorded that he visited "Mr. Long's Ordinary," proving that Long had begun to operate as an "innholder" even while a part of the building was still serving as a place of worship. While at the tavern, Josselyn took a stroll in the back yard and noted that he had seen there "a rattlesnake, a yard and a half long." During this period, Charlestown was very definitely "the frontier."

Robert Long died in 1663, leaving the inn property to his wife and children. His son, John, continued to operate the tavern. During John's ownership, the Long family built an addition to the tavern, possibly as a home for his mother, Elizabeth and the rest of the family. On John's death in 1683, his widow Mary received the inn, dwelling house

and outbuildings. The family also "owned" an unnamed "negro girl" at this time. In 1704, Mary Long made the first of a series of land divisions of the inn property.

A considerable amount of land in City Square was town property from the beginning, used for an open-air market and for the town's pillory, stocks, whipping post, and a cage for Sabbath breakers. Among numerous events that took place in this open area was a public burning of British tea in protest against the despised tea tax, an act described by the Boston Gazette of January 3, 1774 as "well worthy of imitation...." The hint was apparently well received in Boston.

The 1734 courthouse and the 1716 meetinghouse, just across an alley from the Samuel Long house was also part of City Square. It was from the top of the three-story meetinghouse (the town's third) that Charlestown citizens fired at British troops during the Battle of Bunker Hill, provoking the bombardment that resulted in the town's destruction by fire.

"Sold by Publick Vendue"

The Long tavern, named the Three Cranes Tavern, was an important social center for the community of individuals who left the archaeological remains. This is demonstrated by a notice that appeared in the Boston Gazette of December 9, 1746:

Charlestown Earthenware -- To be sold by publick Vendue [auction] on Tuesday the 16th Currant, two o'clock Afternoon, at the Three Cranes Tavern at Charlestown a Dwelling House, Potter's Kiln House and Kiln in Wapping Street [i.e. near the Town Dock] In Charlestown aforesaid, any Person minding to purchase the same before said time may inquire of Michael Bridgen or Grace Parker.

This was a property that had belonged to Grace Parker's nephew, potter James Ingalls, who had previously sold it to Grace Parker and Michael Bridgen as part of a complex transaction designed to raise money for the stoneware venture. The Parkers and the Longs were in fact neighbors. It takes no stretch of the imagination to suppose that Isaac Parker and his son John dropped into the Three Cranes occasionally to discuss business or politics over a mug of ale, a glass of wine, or even a cup of punch made with rum from the Henley Distillery. As a woman, Grace would not have been as likely to seek entertainment in the tavern, but she may well have attended the auction and/or other public functions there.

"The Tavern in the Square"

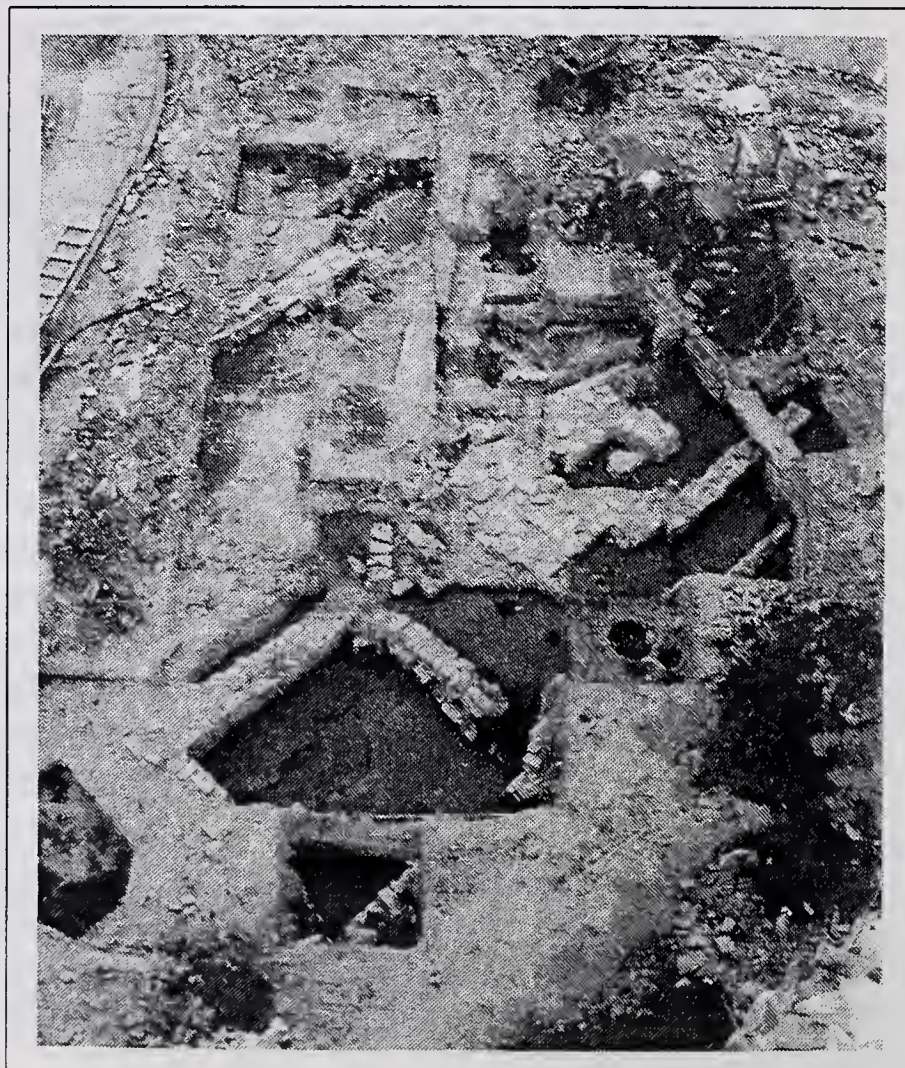
In 1775, the Great House/Three Cranes Tavern earned a place in the history books for the second and final time. On April 19th, a contingent of British troops fell

back on Charlestown after a rather unpleasant encounter near Lexington and Concord. Presumably tired and thirsty, some British officers made for the "tavern in the square" (clearly the Three Cranes) and demanded drink. History does not record whether they were received sullenly or defiantly. However Charlestown, from which Paul Revere had watched for the lights in the steeple of the Old North Church only a few days before, was not in a cooperative mood, as the Battle of Bunker Hill would prove.

The remains of the historic buildings within the City Square Archaeological District were considered significant for many reasons. They represented the dwellings of important citizens and the remains of a tavern which incorporated the first permanent European-style structure in the town, associated with the foundation of the Massachusetts Bay Colony itself. Discovery of remains of the Great House/ Three Cranes Tavern would constitute a news story of national proportions.

Once the actual work of excavation was begun, the results proved highly satisfactory. Excavation showed that both the foundation of the Long House and that of the Great House/Tavern were present and covered almost all of the southeast portion of the site. Furthermore, there was evidence to suggest that portions of the Great House/Tavern had been constructed after 1635, as enlargements of the original structure, while still other sections had been added in the eighteenth century.

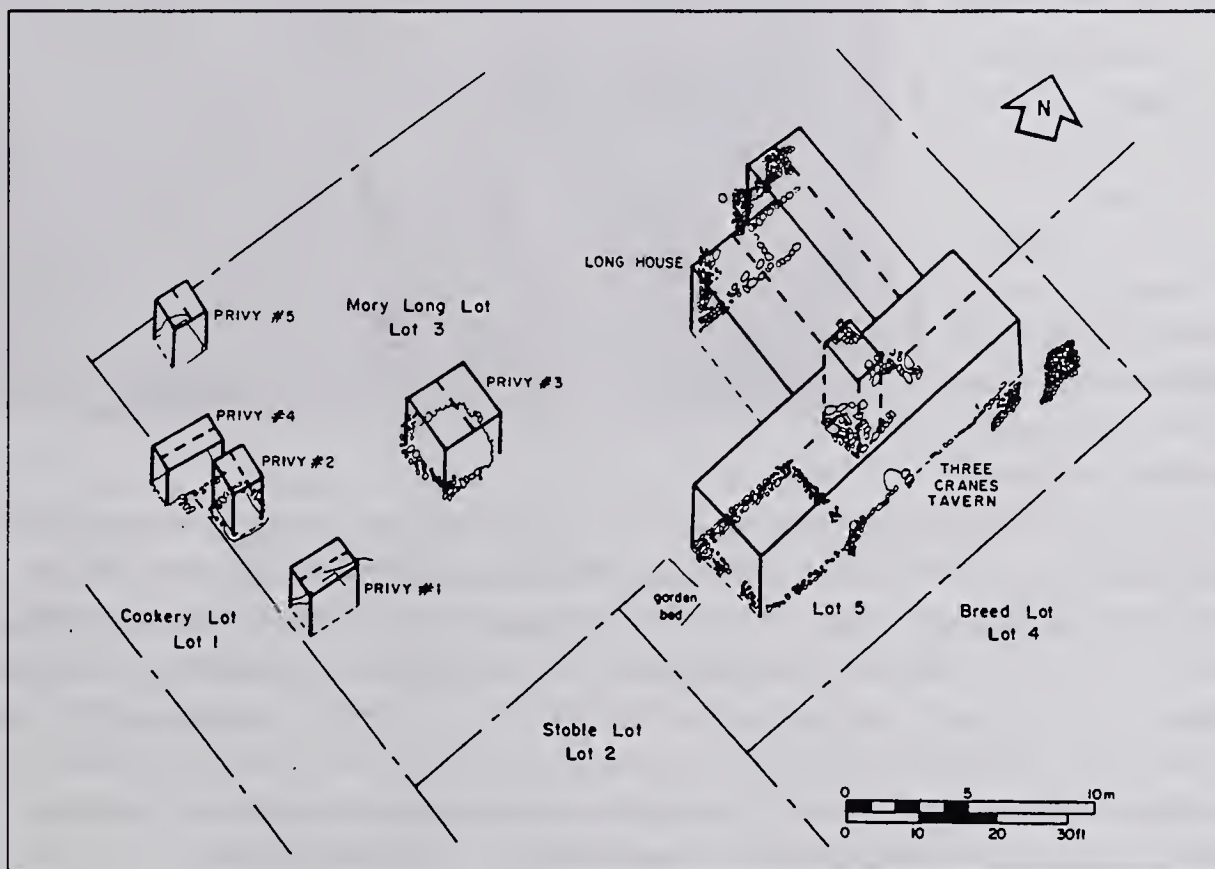
The rectangular foundation of the Great House/Tavern was relatively intact. It included the 5 x 4 foot masonry hearth base for its brick and fieldstone chimney, probably a double-backed design so that it could heat two rooms. Also present was a brick-floored wine cellar, perhaps installed sometime after 1663 when the Longs began storing imported wines to serve to their guests. Numerous post holes were found around the foundation. These small holes once held posts that were probably parts of earlier walls or perhaps scaffolding associated with different periods of construction. For



example, one group of seven post molds discovered by the archaeologist indicate the placement of the scaffolding used when the chimney was constructed. Also within the foundation were debris that had been deposited shortly after the fire of 1775, reflecting the types of cultural materials in use at the time of the Battle of Bunker Hill.

Legal documents suggest that in the seventeenth century a stable building stood to the southwest of the tavern. Another outbuilding was the brew house, which held the great copper beer-brewing kettle that had been part of the kitchen inventory in 1663. The kitchen had a bar for beverage service, and a "chamber" (i.e. a ground-floor bedroom) was constructed over the wine cellar.

Another improvement during John Long's time (1663-1683) was the construction of the attached Long House to the north. This appears to have had, on the ground floor, a "little kitchen," with a parlor next to it. On the second floor was a room running the whole length of the house and another, smaller one built over the connecting entry.



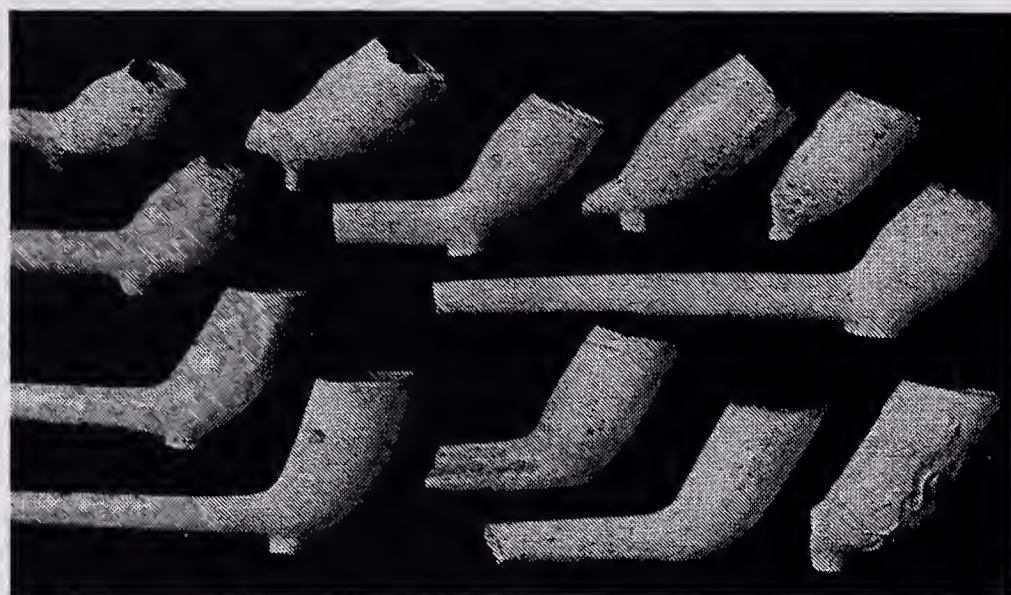
The seventeenth-century Long House had some features associated with its foundation, notably the hearth base. There were also five privies (outhouses) associated with the tavern and the Long House. The privies were of two basic types: wood-lined and stone-lined. The large number of privies is explained by the ever-changing roster of the inn's guests, who would naturally require more "facilities" than even the largest family.

In the eighteenth century, during the ownership of John's widow Mary Long and later her granddaughter, improvements continued to be made to both buildings. The house acquired a small stone-lined cellar addition and a brick floor around the kitchen hearth, while the tavern was added onto by several small additions which may have brought its overall dimensions to 46 x 14 (or 15) feet.

One of the more curious discoveries was a shallow pit that underlay one of the eighteenth-century foundation additions. The pit contained the complete skeleton of a domestic cat, which had been buried with two decorated redware vessels. The burial may be related to a European ritual and superstition, in which domestic cats were buried in and under structures to protect the inhabitants from evil.

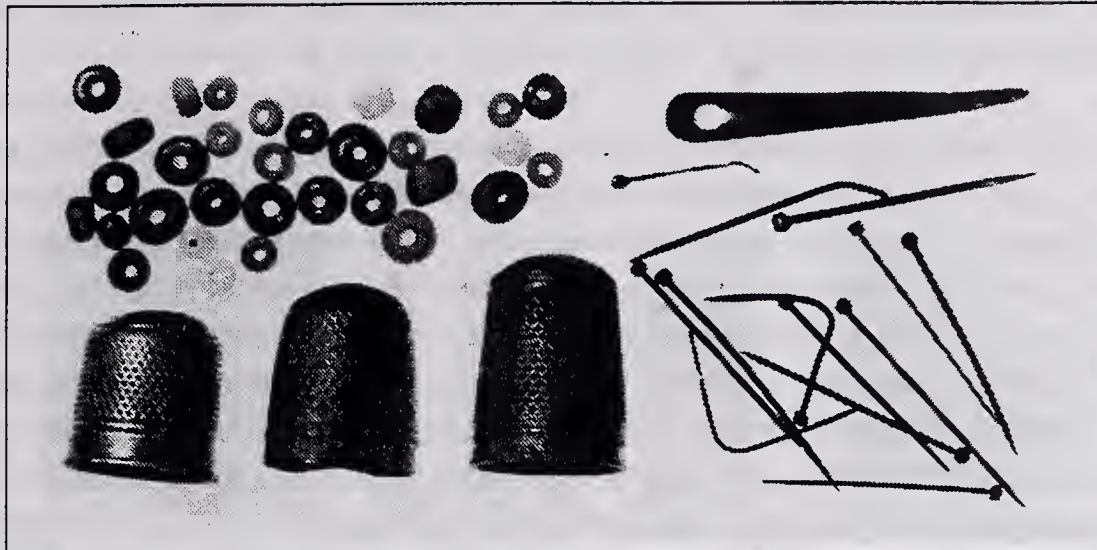
Trash

In all, over 100,000 artifacts were removed during excavations in City Square. This rich collection added immeasurably to the archaeological understanding of the site, its features, and the social conditions of the build-



ing's period of occupancy. The demolition debris from the tavern was revealing for what it did not contain. There were large numbers of certain items to be expected in a tavern, notably clay pipes and pottery, as well as building materials such as window leading, nails and bricks, but relatively few personal items or glass fragments. One possible explanation is that there was ample warning of the British bombardment -- enough, at least, so that the innkeepers and guests had time to remove small, valuable items (which would have included glassware and wine bottles, expensive imported ceramics, currency, tools, weapons, jewelry, clothing, and the better furniture) to a safer location.

The idea of a fairly orderly evacuation prior to the bombardment is supported by comparing the artifacts found in the demolition debris of the tavern with that found in the privies. The privies, in general, contained items similar in type to those found in the demolition debris, with the significant addition of more expensive ceramics and glassware, plus clothing items such as buttons, beads, cloth scraps and leather, small personal possessions such as gaming pieces and coins, and sewing notions which included thimbles, pins and needles.



Other categories of items found in the privies include plant remains such as nuts and seeds, demolition debris from the period following the battle and the fire, and cannon balls, lead shot, and gun flints. The many trash pits around the tavern contained yet a third assortment of materials, including building rubble plus household trash such as bone and shell, and broken glass and ceramics. Absent were personal items (the exception being one small lead seal) and items related to clothing.

"Hoopla!"

Not surprisingly, the uncovering of the foundation of what was once the Great House attracted considerable media attention, both locally and nationally. Pictures of the site appeared in the press, local dignitaries came to inspect the remains, and there was a lively public debate over the ultimate fate of the foundation. After some deliberation, it was decided to expose, document, and remove the entire set of remains relating to the building itself, meaning the house foundation, the brick-floored cellar and the hearth base. At this point the entire foundation was minutely recorded in both drawings and photographs, each piece being numbered for later reassembly, then dismantled, packed into labeled containers, and removed to a facility maintained by the Massachusetts Highway Department.

The archaeological evidence suggests that the original 1629/30 Great House may have been constructed in a rather impermanent manner, having wooden supports laid directly in shallow trenches with no stone foundation to preserve them from rot and weather. The stone hearth that was excavated and removed by the archaeologists may have been the original one, and may have supported a chimney of wood-framed clay. The evidence suggests, but does not confirm, that the building may have had a three-room plan, arranged as a hall, parlor, and service room. This plan is similar to buildings that existed in John Winthrop's native East Anglia at the time of settlement. Documents relating to the 1635 sale of the building to Robert Long, however, suggest that the structure contained only two rooms, with an open second story. Of course, the two versions could

be reconciled by supposing that an interior wall had been removed sometime prior to the 1635 sale of the building.

The cultural materials from the site as a whole provide an extremely interesting contrast to the materials from the Parker-Harris Site, which was almost exactly contemporary and located only a few hundred yards away. Even though the Parker household was certainly pursuing a life style that could be called comfortable, if not luxurious, their garbage contained far smaller percentages of clay pipes and specialized drinking vessels than did those of the tavern. Only a small portion of the Parker-Harris Site glass collection is related to wine drinking and wine service, while the collection from the tavern site is much larger. The tavern glassware also shows a very broad range of dates and styles, reflecting a pattern of more-or-less continual breakage and replacement that was not found at the Parker-Harris Site.



Similarly, a greater number of the tavern ceramics are associated with drinking (cups, mugs, beakers, pitchers, jugs) and food service (rather than food processing and storage) when compared with those from the Parker-Harris Site, although it must be noted that the Parker-Harris collection derived not only from domestic use but from the wasters and breakage patterns of the pottery itself. A further link between the Longs and the Parkers was made by the recovery of several Parker stoneware vessels from one of the tavern's privies.

The trade patterns of Charlestown were also illuminated by the results of the Great House excavation. All of the very early ceramics were imported of course, mostly from Germany in the form of Rhenish stoneware, with the addition of a few unusual pieces from Italy and Holland and a single French cup. No English imports were found

from this period. In the eighteenth century, this pattern changed radically, with Continental ceramics being replaced by British products. Many of the new English pieces were of fine quality and reflected the new social importance attached to the drinking of tea, coffee, and chocolate. Oriental ware was also used at this time, especially bowls, saucers, and tea bowls. All the pipes found on the site are either English or Dutch in origin, with little variation over time, while all the glass tableware is European, primarily English.

Miscellaneous objects, too, display an international flavor. They include a coconut shell, a French cloth seal made of lead (the type fixed to a bale of cloth by the wholesaler), some English buttons, and coins of English and Spanish origin. Pieces of ballast materials, used to weight ships, such as English flint and chalk nodules were also found, as they had been in other contexts at other sites, notably the Henley Distillery and Town Dock Wharves.

As a final part of their analysis, the archaeologists examined the artifact collection from the Great House/Three Cranes Tavern in the light of certain theoretical predictions contained in the work of previous researchers. One of these predictions differentiated between seventeenth and eighteenth century practices of food preparation, service, and consumption as being of two distinct types: courtly and folk. The courtly tradition was once associated with the elite and with conspicuous display, while the folk tradition was that of the average family. Archaeological evidence from the Three Cranes Tavern indicated that the tavern was no roadside hash house, but one of the "best places in town."



CHARLESTOWN'S HISTORY, PUTTING IT ALL TOGETHER

Viewed as a whole, the Central Artery North archaeology program produced a wealth of new information for researchers to consider. The redware industry was brought into focus as never before through excavations at the Parker-Harris and Town Dock Pottery Sites, which yielded detailed data concerning actual production processes, a broad sample of the types of wares produced, and a valuable look at the ways in which urban potters used space in siting their facilities during the eighteenth and early nineteenth centuries.

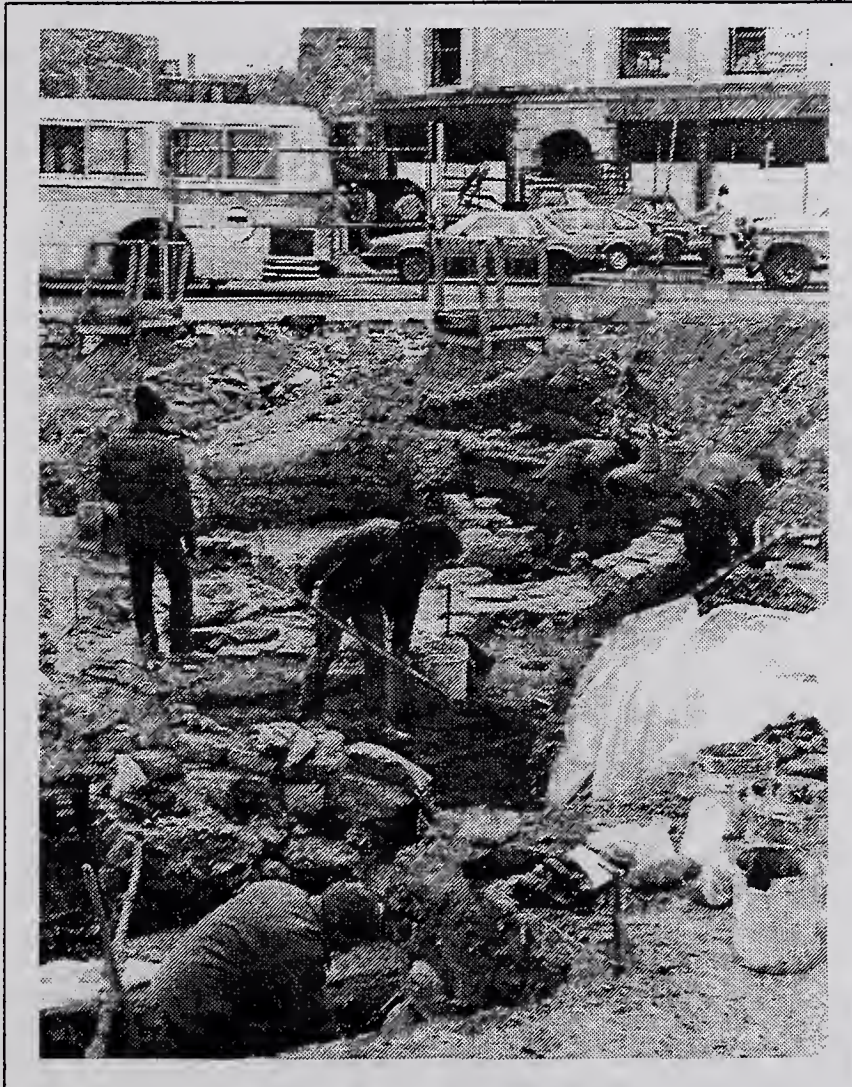
Most revealing in terms of Charlestown's maritime facilities was information obtained from the Town Dock Wharves/Dry Dock and Town Dock Pottery Sites concerning the specifics of wharf technology over two centuries (roughly 1630-1830). Archaeologists were able to reconstruct the actual building sequence of the wharf containing Charlestown's Dry Dock, a structure that was the first of its kind in North America, and to observe techniques that illustrated both the variability and conservatism of wharf-building craftsmanship at the time. Although several different types of construction were used, the basic techniques had not changed since medieval times, and did not change significantly even as late as the post-Revolutionary period. Evidence that the Town Docks themselves were being repaired and maintained as late as the early nineteenth century contradicted earlier assumptions that the dock had undergone a period of decay and disuse before being filled in the 1830s.

Almost every site contained information relevant to regional exchange or trade networks from 1630 to 1880, most prominently the City Square Archaeological District and the Henley Distillery. Artifacts from the Three Cranes Tavern were particularly illuminating since the tavern was a center of exchange, visited by travelers, and expected to display the newest fashions in both foodstuffs and serving utensils. The artifacts from the tavern site revealed new patterns in regional and even global trade. The distillery remains proved to originate from a single, self-contained "shop" operating within a larger distillery complex between 1790 and 1864. As such, they demonstrated an interesting middle stage between rum distilling as a cottage industry and the fully industrialized distilling processes of the later nineteenth century. Rum began as an important component of regional trade but was later replaced, in most of the country, by whisky. The persistence of rum production in Charlestown clearly indicated that its exchange network was regional rather than national in scope. Another finding, which emerged from an examination of the ceramics from several of the excavated sites was that the people who lived in Charlestown owned pottery from Europe and England. Most of the pottery made in Charlestown was sold to people living in the rural towns of Massachusetts.

In analyzing regional foodways, it was again the Three Cranes Tavern that played the greatest role. Documentation of features such as the inn's hearth, chimney and wine

cellar related to the topic of food preparation, while the remains recovered from the inn's privies related to food consumption, as seen in the collections of butchered bones and edible plant remains, and to trash disposal, which is also an essential element of a society's foodways. The site as a whole provided invaluable comparative information for future studies of taverns and the role they played in early American life

The subject of the relationship between urban and rural areas was clearly addressed through the archaeology conducted at the Smith Site. The Smith Site contained evidence for mixed commercial and residential use, a pattern that prevailed on the water-



front as a whole and reflected the internal patterning that resulted from both kinship ties and the economic dependence on the maritime economy. The artifacts from the Smith Site reflected land alteration, land filling, craft activities, and other processes about which little had previously been known.

A final, unexpected research issue which was addressed through the archaeology of the Central Artery North sites related to the discovery of the prehistoric site at the Town Dock Pottery. Archaeologists are perpetually attempting to understand how human beings adapted to changing environmental conditions

through the 10,000 years of prehistory. In the case of the Town Dock Pottery Prehistoric Site, the issue of sea level stabilization and estuary formation as it relates to human settlement of the area could be addressed.

Thus the Central Artery North archaeology program has enlightened and clarified our view of early Charlestown, from the long-gone vision of Native American hunter-gatherers chipping stone tools around a campfire to the building of a Great House in a new world. We can see the commercial shrewdness of the investors in the Dry Dock, the endurance of the misfortune-plagued Smiths, Grace Parker's commercial drive, the industry of the town's potters, distillers, and mariners, and the defiance of the Charlestown tea-

burners. We can even feel the sorrow of some member of the Long household at the death of a favorite cat, and hear a resounding echo from the crowds of tavern patrons, Redcoats and Patriots alike -- eating, gaming, drinking, attending auctions. We would be immeasurably poorer if this eloquent story had been destroyed unread.

The Massachusetts Department of Environmental Management in collaboration with the Massachusetts Highway Department, The Public Archaeology Laboratory, Inc., and the Friends of City Square Park have designed a permanent interpretive exhibit at the original site of the Great House/Three Cranes Tavern in City Square Park, Charlestown. Visitors can stroll among the actual foundation stones, including the hearth, chimney, and wine cellar, uncovered during the 1980s archaeological dig. Through this exhibit the rich history of City Square and the historical contributions of the Charlestown community can be preserved for the future.

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